

# MICHIGAN STATE UNIVERSITY

## 2010 On-Farm Grower Trials and Potato Variety Update

February 16, 2011

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**2010 ON-FARM GROWER TRIALS and POTATO VARIETY UPDATE**  
**MICHIGAN STATE UNIVERSITY**  
**February 16, 2011**

**CHIP-PROCESSING VARIETIES and ADVANCED BREEDING LINES**

**2010 TRIALS**

<b>CHIP-PROCESSING LINES:</b>	<b>On-Farm</b>	<b>SFA (p. 16)</b>	<b>Demo Bin</b>	<b>Box Bin (p. 15)</b>	<b>Advanced (p. 35)</b>	<b>Scab (pp. 44-47)</b>	<b>Black Spot (pp. 49-54)</b>
Atlantic		✓			✓	✓	✓
Pike	✓					✓	✓
Snowden	✓	✓		✓	✓	✓	✓
A00188-3C	✓			✓		✓	✓
A01143-3C	✓			✓		✓	✓
AF2291-10	✓	✓		✓		✓	✓
CO00188-4W	✓			✓		✓	✓
CO00197-3W	✓			✓		✓	✓
CO95051-7W	✓	✓				✓	✓
CO97043-14W		✓					✓
CO97065-7W		✓					✓
FL1879	✓				✓	✓	✓
MSH228-6	✓			✓	✓	✓	✓
MSJ126-9Y		✓	✓		✓	✓	✓
MSL007-B	✓			✓	✓	✓	✓
MSL292-A	✓	✓		✓	✓	✓	✓
MSP270-1				✓	✓	✓	✓
MSP459-5	✓			✓	✓	✓	✓
MSP515-2	✓			✓	✓	✓	✓
MSQ035-3	✓					✓	
MSQ070-1	✓			✓	✓	✓	✓
MSQ279-1	✓	✓		✓	✓	✓	✓
MSR061-1	✓			✓	✓	✓	✓
MSR102-3	✓			✓		✓	
NY138 (Waneta)		✓					✓
NY139 (Lamoka)	✓	✓	✓	✓		✓	✓
W2133-1 (Nicolet)	✓		✓				✓
W2310-3 (Tundra)	✓	✓		✓		✓	✓
W2717-5	✓	✓		✓		✓	✓
W2978-3	✓	✓		✓		✓	✓
W5015-12	✓	✓		✓		✓	✓

**2010 ON-FARM GROWER TRIALS and POTATO VARIETY UPDATE**  
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**TABLESTOCK VARIETIES and ADVANCED BREEDING LINES**

**2010 TRIALS**

TABLESTOCK LINES:	2010 TRIALS					
	On-Farm	Russet (p. 37)	Advanced (p. 35)	NCR (p. 36)	Scab (pp. 44-47)	Blackspot (pp. 49-54)
<i>Round Whites:</i>						
Onaway	✓				✓	✓
Reba	✓				✓	✓
NSL211-3	✓			✓	✓	✓
MSL268-D	✓			✓	✓	✓
MSM182-1	✓			✓	✓	✓
MSQ176-5	✓			✓	✓	✓
MSQ440-2	✓		✓		✓	✓

*Russets:*

Classic Russet	✓					
GoldRush	✓	✓			✓	✓
Russet Norkotah	✓	✓			✓	✓
Silverton Russet	✓	✓			✓	✓
A98134-2Rus	✓	✓				✓
A98289-1Rus	✓	✓			✓	✓
A01124-3Rus	✓	✓			✓	✓
A0008-1TERus	✓					
CO99053-3Rus	✓	✓			✓	✓
W2683-2Rus	✓	✓			✓	✓
W6234-4Rus	✓	✓			✓	✓
W8946-1Rus	✓	✓			✓	✓

**2010 TRIALS**

<b>TABLESTOCK LINES:</b>	<b>On-Farm</b>	<b>Adaptation (p. 39)</b>	<b>Preliminary (p. 42-43)</b>	<b>NCR (p. 36)</b>	<b>Scab (pp. 44-47)</b>	<b>Black Spot (pp. 49-54)</b>
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*Yellow, Reds and Novelty:*

Colorado Rose	✓		✓		✓	✓
CO99256-2R	✓		✓		✓	✓
CO00291-5R	✓		✓		✓	✓
MSR217-1R	✓		✓		✓	✓
MSS544-1R	✓	✓			✓	✓
W2609-1R	✓			✓	✓	✓
W5767-1R	✓		✓		✓	✓

# 2010 MSU Processing Potato Variety Trials

Entry	Pedigree	2010 Scab Rating*	Characteristics
Atlantic	Wauseon X B5141-6 (Lenape)	2.9	High yield, early maturing, high incidence of internal defects, check variety, high specific gravity
Pike (NYE55-35)	Allegany X Atlantic	1.1	Average yield, early to mid-season maturity, small tuber size profile, early storage check variety, some internal defects, medium specific gravity
Snowden (W855)	B5141-6 X Wischip	2.9	High yield, late maturity, mid-season storage check variety, reconditions well in storage, medium to high specific gravity
A00188-3C	A91790-13 X Dakota Pearl	1.5	High U.S. No. 1 yield, scaly buff skin, high specific gravity
A01143-3C	COA95070-8 X Chipeta	1.8	High yielding, scaly buff chipper; smaller tuber size
AF2291-10	SA8211-6 X EB8109-1	2.0	Early blight resistant clone with good chipping quality, medium-late vine maturity, round to oblong, white netted tubers, specific gravity similar to Atlantic
CO00188-4W	A90490-1W X BC0894-2W	1.5	Medium yield potential. small tuber size, minimal grade defects, medium-early maturity, high specific gravity, some ability to recondition out of 40° F
CO00197-3W	A91790-13W X NDTX4930-5W	3.5	Medium yield potential, small size profile, minimal grade defects, early maturity, medium-high specific gravity, some ability to recondition out of 40° F
CO95051-7W	AC88456-6W X BC0894-2W	1.5	Low – average yield, medium to late maturity, high percent of US#1 tubers, low internal defects, medium specific gravity, vine rot is a concern
CO97043-14W	AC91817-5 X AC87340-2	3.0**	Average yield, medium maturity, white skin, oblong tuber type, medium specific gravity
CO97065-7W	AC92513-3 X Chipeta	2.0**	Average yield, early maturity, white skin, round tuber type, medium specific gravity
FL1879	Snowden X FL1207	3.5	High yield, late maturity, large tuber type, late season storage, medium specific gravity, check variety
MSH228-6	MSC127-3 X OP	1.0	Average yield, mid-late season maturity, blocky flat tuber type, shallow eyes, medium specific gravity
MSJ126-9Y	Penta X OP	1.0	Medium yield, cold chipper from 45° F, uniform A-size tubers, attractive appearance, good internal quality, long term storage potential, medium specific gravity
MSL007-B	MSA105-1 X MSG227-2	1.0	Average yield, early to mid-season maturity, uniform tuber type, medium specific gravity, scab resistant

\*Scab rating based on 0-5 scale; 0 = most resistant and 5 = most susceptible. \*\*2009 data

<b>Entry</b>	<b>Pedigree</b>	<b>2010 Scab Rating*</b>	<b>Characteristics</b>
MSL292-A	Snowden X MSH098-2	2.5	Above average yield, scab susceptible, late blight susceptible, medium-high specific gravity, long storage potential
MSP270-1	MSNT-1 X MSG227-2	1.0	Below average yield, uniform round type, netted skin, good chip quality from early to mid-season storage, average specific gravity
MSP459-5	Marcy X NY121	3.0	Bright chips, low incidence of defects, medium specific gravity
MSP515-2	Marcy X Missaukee	2.3	Above average yield, large tuber size, medium late maturity, below average specific gravity
MSQ035-3	MSG227-2 X Missaukee	1.0	Average yield potential, low specific gravity, uniform round tuber type
MSQ070-1	MSK061-4 X Missaukee	1.3	Round tuber type, late maturity, scab and late blight resistant, high specific gravity, strong vine and roots
MSQ279-1	Boulder X Pike	1.3	High yield, large round tubers, good internal qualities
MSR061-1	W1201 X NY121	1.3	Average yield, round tuber type with netted skin, low sugars, PVY resistant, moderate late blight resistance
MSR102-3	W1773-7 X Missaukee	1.0	Below average yield, very late maturity, uniform tuber type, foliar late blight resistance to US-8
NY138 (Waneta)	Marcy X NY115	-	High yield, large uniform round tuber type, below average specific gravity, great chip quality
NY 139 (Lamoka)	NY120 X NY115	2.0	High yield, mid-late season maturity, medium specific gravity, oval to oblong tuber type
W2133-1 (Nicolet)	Snowden X S440	1.8**	Medium to high yield, mid to late maturity, good internal quality, nice tuber type, 47° F cold chipper, medium specific gravity
W2310-3 (Tundra)	Pike X S440	2.0	Average yield potential, high specific gravity, smaller size profile, good chip quality from storage
W2717-5	S440 X ND2828-15	3.0	Round tuber type, medium yield, medium maturity, medium specific gravity, moderate scab susceptibility
W2978-3	Monticello X Dakota Pearl	3.5	Above average yield potential, early bulking, medium early vine maturity, scab susceptible
W5015-12	Brodick X W1355-1	3.0	High tuber set and yield, medium-late vine maturity, uniform size tubers, tubers tend toward flat shape, very flat in some environments

\*Scab rating based on 0-5 scale; 0 = most resistant and 5 = most susceptible. \*\*2009 data

**2010 Processing Potato Variety Trial  
Overall Average - Eight Locations  
Allegan, Branch, Mecosta, Montcalm, St. Joseph Counties**

NUMBER OF LOCATIONS	LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>3</sup>	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>4</sup>	VINE MATURITY <sup>5</sup>	COMMENTS	CHIP COMMENTS	4-YR AVG US#1 CWT/A
		US#1	TOTAL	US#1	Bs	As	OV	PO			HH	VD	IBS	BC						
2	W2133-1	496	551	90	8	87	3	2	1.089	2.0	0	5	0	1	20	3.8	3.5	tr pitted scab	severe SED	490***
8	W5015-12	459	531	86	12	81	5	2	1.081	1.3	15	17	7	0	100	2.9	3.3	pitted and surface scab	sl SED	473**
2	A01143-3C	445	547	83	8	83	0	9	1.079	1.3	0	0	3	0	20	3.0	3.8		tr SED	335**
4	FL1879	444	458	97	2	89	8	1	1.075	1.8	14	3	0	0	40	2.9	2.6	sl surface scab	tr VD	464
1	NY138	444	471	94	6	82	12	0	1.071	1.0	1	5	0	0	30	3.0	3.0			444*
2	AF2291-10	444	507	88	8	76	12	4	1.083	1.3	4	11	0	0	40	2.3	3.0	not uniform type, tr points	sl SED, some HH	444*
1	Atlantic	443	472	94	6	82	12	0	1.082	1.5	8	3	2	0	30	3.0	3.5	surface and pitted scab	SED, VD	443*
6	Snowden	433	472	89	10	83	6	1	1.077	1.3	11	21	0	0	80	3.1	3.1	pitted scab	tr of severe SED	420
2	A00188-3C	432	518	82	16	82	0	2	1.082	1.3	0	7	0	0	20	3.3	2.5	small uniform tuber type	sl SED	330**
5	MSP515-2	414	439	95	5	83	12	0	1.072	1.3	2	6	2	0	50	2.6	3.8	sl surface and pitted scab	severe VD	414*
8	MSL292-A	408	453	90	10	85	5	0	1.076	1.1	2	15	1	0	100	3.3	2.4	pitted and surface scab, uniform type	tr SED	424***
5	MSL007-B	392	425	91	9	88	3	0	1.074	1.1	2	6	1	0	50	2.0	2.8	small overall size, heavy dark net, sl pitted and surface scab	tr VD	351***
3	W2978-3	391	446	87	11	83	4	2	1.071	1.3	1	7	0	0	50	2.7	2.2	surface and pitted scab	SED	391*
5	MSH228-6	384	405	94	5	86	8	1	1.076	1.3	1	12	0	1	50	3.3	2.9	surface scab	SED	357
8	NY139	378	407	93	6	87	6	1	1.079	1.1	1	13	0	0	100	2.9	2.6	sl surface scab, pointed pickouts	tr SED	412***
1	CO97065-7W	344	377	91	8	81	10	1	1.070	1.0	9	1	0	1	30	3.5	1.5	surface and pitted scab		336**
8	W2310-3	341	407	84	11	82	2	5	1.080	1.3	2	7	1	2	100	3.2	2.9	misshapen tubers in pickouts, surface and pitted scab	tr SED	299**

NUMBER OF LOCATIONS	LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>3</sup>	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>4</sup>	VINE MATURITY <sup>5</sup>	COMMENTS	CHIP COMMENTS	4-YR AVG US#1 CWT/A
		US#1	TOTAL	US#1	Bs	As	OV	PO			HH	VD	IBS	BC						
4	MSQ035-3	329	370	85	9	81	4	6	1.063	1.6	0	3	0	0	40	2.5	2.4	gc in pickouts, sl surface and pitted scab	SED	329*
2	CO00188-4W	317	425	71	29	71	0	0	1.076	1.0	0	2	0	0	20	3.3	2.3	small uniform tuber type		335**
5	Pike	317	356	89	9	83	6	2	1.078	1.0	4	8	1	0	50	3.1	2.3	heat necrosis in two tubers	tr heat necrosis	357
6	MSQ279-1	316	351	90	5	81	9	5	1.070	1.5	2	1	8	0	60	2.8	3.5	tr surface scab, gc and misshapen pickouts	SED	385**
2	CO00197-3W	298	381	71	26	71	0	3	1.072	1.0	1	3	0	0	20	3.0	3.5	small tuber yield	tr SED, VD	373**
1	MSJ126-9Y	285	336	84	16	81	3	0	1.065	1.0	0	3	0	0	30	2.5	2.5	uniform type		334
6	W2717-5	279	342	82	13	80	2	6	1.082	1.0	8	20	1	2	80	3.4	2.8	pitted scab, gc in pickouts, severe VD	SED	273**
7	MSQ070-1	278	334	82	13	81	1	5	1.080	1.2	8	10	8	2	70	2.4	3.7	sl surface scab, nice round tuber type, tr sticky stolons	sl SED	354**
5	MSR102-3	273	302	90	6	81	9	4	1.073	2.0	0	7	1	0	50	2.5	4.2	sicky stolen, surface scab	SED	273*
5	MSR061-1	271	314	85	14	85	0	1	1.076	1.5	3	1	2	1	50	2.6	2.6	misshapen pickouts, nice netted type, tr pitted scab	sl SED	275**
1	CO97043-14W	265	305	87	13	80	7	0	1.065	1.0	0	7	0	0	30	3.0	3.0	surface and pitted scab		301**
5	MSP459-5	264	334	77	23	77	0	0	1.079	1.3	3	10	0	0	50	3.1	2.3	small size profile, tr surface scab	SED, VD	288**
1	MSP270-1	252	304	83	17	80	3	0	1.074	1.0	0	1	1	0	10	1.0	3.5	netted skin, uniform type		252*
2	CO95051-7W	174	276	61	30	61	0	9	1.074	1.0	1	2	1	0	20	2.3	3.5	growth cracks, small tuber size	SED	271

MEAN 355 407 86

1.076

tr = trace, sl = slight, N/A = not applicable

SED = stem end defect, gc = growth crack

<sup>1</sup>SIZE

Bs: < 1 7/8"

As: 1 7/8" - 3.25"

OV: > 3.25"

PO: Pickouts

<sup>2</sup>TUBER QUALITY (number of tubers per total cut)

HH: Hollow Heart

VD: Vascular Discoloration

IBS: Internal Brown Spot

BC: Brown Center

<sup>3</sup>CHIP COLOR SCORE - Snack Food Association Scale

(Out of the field)

Ratings: 1 - 5

1: Excellent

5: Poor

<sup>4</sup>VINE VIGOR RATING

Date Taken: N/A

Ratings: 1 - 5

1: Slow Emergence

5: Early Emergence (vigorous vine, some flowering)

<sup>5</sup>VINE MATURITY RATING

Date Taken: N/A

Ratings: 1 - 5

1: Early (vines completely dead)

5: Late (vigorous vine, some flowering)

\*One-Year Average

\*\*Two-Year Average

\*\*\*Three-Year Average

# 2010 Processing Potato Variety Trial County Line Farms, Allegan County, MI

Harvest 11-Oct-10 138 Days  
DD, Base 40<sup>6</sup> 3440

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>3</sup>	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>4</sup>	VINE MATURITY <sup>5</sup>	COMMENTS	CHIP COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO			HH	VD	IBS	BC					
MSH228-6	382	401	95	4	93	2	1	1.067	1.5	0	1	0	0	10	4.0	1.0	sl pitted scab	severe SED
<b>FL1879</b>	<b>331</b>	<b>346</b>	<b>96</b>	<b>4</b>	<b>92</b>	<b>4</b>	<b>0</b>	<b>1.068</b>	<b>1.0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>3.5</b>	<b>1.0</b>		
MSR102-3*	313	334	94	6	89	5	0	1.064	1.5	0	1	0	0	10	3.5	2.5	uniform tuber type	SED
MSR061-1*	310	342	91	7	91	0	2	1.064	1.0	0	0	1	0	10	3.5	1.0	nice uniform type, tr pitted scab	SED
MSL292-A	257	281	91	9	91	0	0	1.065	1.0	0	1	1	0	10	3.5	1.0	nice uniform type	SED
W2310-3	249	288	86	9	86	0	5	1.078	1.0	1	0	0	1	10	3.5	1.0		
MSQ070-1*	214	259	83	16	83	0	1	1.073	1.0	1	1	1	0	10	3.0	1.5	tr surface scab	SED
NY139*	208	219	95	5	84	11	0	1.068	1.0	0	1	0	0	10	3.0	1.0	tr surface scab, oblong tuber type	
MSQ035-3	207	236	88	7	81	7	5	1.067	1.0	0	0	0	0	10	3.0	1.0	sl gc and misshapen pickouts	SED
W5015-12	207	243	85	12	85	0	3	1.063	1.0	3	1	0	0	10	3.0	1.0	small tuber size, tr pitted scab	
MSQ279-1*	204	235	87	3	81	6	10	1.059	1.5	0	0	6	0	10	3.0	2.5	tr surface scab, gc and misshapen pickouts	SED
<b>Pike</b>	<b>182</b>	<b>202</b>	<b>89</b>	<b>10</b>	<b>76</b>	<b>13</b>	<b>1</b>	<b>1.065</b>	<b>1.0</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>10</b>	<b>2.5</b>	<b>1.0</b>		
MSL007-B*	178	191	94	4	86	8	2	1.064	1.0	0	0	1	0	10	2.0	1.0	uniform tuber type, heavy netted skin	severe SED
MSP515-2*	151	156	97	2	84	13	1	1.056	1.0	1	1	2	0	10	2.0	2.0	tr surface scab	severe SED
<b>Snowden</b>	<b>135</b>	<b>171</b>	<b>79</b>	<b>21</b>	<b>79</b>	<b>0</b>	<b>0</b>	<b>1.060</b>	<b>1.0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>3.0</b>	<b>1.0</b>	<b>small tuber size</b>	
MSP459-5*	95	131	72	28	72	0	0	1.071	1.0	2	1	0	0	10	3.0	1.0	small tuber size	SED, VD
<b>MEAN</b>	<b>226</b>	<b>252</b>	<b>89</b>					<b>1.066</b>										

tr = trace, sl = slight, N/A = not applicable

SED = stem end defect, gc = growth crack

<sup>1</sup> SIZE	<sup>2</sup> TUBER QUALITY (number of tubers per total cut)	<sup>3</sup> CHIP COLOR SCORE - Snack Food Association Scale	<sup>4</sup> VINE VIGOR RATING	<sup>5</sup> VINE MATURITY RATING
Bs: < 1 7/8"	HH: Hollow Heart	(Out of the field)	Date Taken: 28-Jun-10	Date Taken: 3-Sep-10
As: 1 7/8" - 3.25"	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Ratings: 1 - 5
OV: > 3.25"	IBS: Internal Brown Spot	1: Excellent	1: Slow Emergence	1: Early (vines completely dead)
PO: Pickouts	BC: Brown Center	5: Poor	5: Early Emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)

Planted: 26-May-10  
Vines Killed: 7-Sep-10  
Days from Planting to Vine Kill: 104  
Seed Spacing: 10"  
No Fumigation

<sup>6</sup>MAWN STATION: Grand Junction  
Planting to Vine Kill

\* = all plots were in a wet area of the field

# 2010 Processing Potato Variety Trial Lennard Ag. Company, Branch County, MI

Harvest 19-Oct-10 126 Days

DD, Base 40<sup>6</sup> 3288

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>				SP GR	CHIP SCORE <sup>3</sup>	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>4</sup>	VINE MATURITY <sup>5</sup>	COMMENTS	CHIP COMMENTS		
	US#1	TOTAL	US#1	Bs	As	OV			PO	HH	VD	IBS						BC	
MSL007-B	476	519	91	8	87	4	1	1.081	1.5	0	3	0	0	10	3.0	3.5	points in pickouts, tr pitted scab		
<b>FL1879</b>	<b>470</b>	<b>485</b>	<b>96</b>	<b>2</b>	<b>80</b>	<b>16</b>	<b>2</b>	<b>1.078</b>	<b>1.5</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>4.0</b>	<b>3.0</b>	<b>points and gc in pickouts, pink eye</b>		
MSH228-6	464	493	94	4	80	14	2	1.076	1.0	1	3	0	1	10	4.5	4.0	misshapen pickouts, flat oval type, heavy netting, no scab		
MSP459-5	442	512	86	13	86	0	1	1.079	1.0	0	5	0	0	10	4.0	3.0	misshapen pickouts, netted skin, small uniform type		
W5015-12	434	539	80	17	80	0	3	1.082	1.5	1	3	0	0	10	4.0	4.0	gc in pickouts, surface and pitted scab		
MSP515-2	408	432	95	5	91	4	0	1.075	1.0	0	2	0	0	10	4.0	4.0	nice uniform type, clean		
<b>Snowden</b>	<b>400</b>	<b>446</b>	<b>90</b>	<b>5</b>	<b>76</b>	<b>14</b>	<b>5</b>	<b>1.080</b>	<b>1.0</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>4.0</b>	<b>4.0</b>	<b>pitted scab</b>	<b>tr of severe SED</b>	
W2133-1	389	434	89	7	84	5	4	1.088	2.0	0	5	0	1	10	4.0	3.5	tr pitted scab	severe SED	
MSL292-A	389	404	96	4	81	15	0	1.078	1.5	0	5	0	0	10	4.0	3.0	tr pitted scab, netted skin		
MSR061-1	356	387	92	7	92	0	1	1.074	2.5	1	1	1	0	10	4.0	3.5	misshapen pickouts, nice netted type, tr pitted scab		
<b>Pike</b>	<b>335</b>	<b>375</b>	<b>89</b>	<b>6</b>	<b>78</b>	<b>11</b>	<b>5</b>	<b>1.079</b>	<b>1.0</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>3.5</b>	<b>3.0</b>	<b>misshapen pickouts</b>		
W2310-3	316	381	83	11	82	1	6	1.072	1.5	0	0	0	0	10	4.5	4.0	knobs, misshapen pickouts, pitted scab		
W2717-5	287	434	66	3	60	6	31	1.081	1.0	2	4	1	0	10	4.0	3.5	knobs and gc in pickouts, tr surface scab, severe VD	SED	
MSQ279-1	285	342	84	3	71	13	13	1.068	2.0	0	1	1	0	10	4.0	4.0	gc in pickouts, sl surface and pitted scab		
NY139	201	214	93	4	91	2	3	1.083	1.5	0	5	0	0	10	3.0	3.0	pour seed stand, misshapen pickouts, points	SED	
MSR102-3	143	167	86	6	62	24	8	1.076	1.5	0	0	0	0	10	3.5	5.0	gc and misshapen pickouts, poor yield		
MSQ070-1	126	200	63	15	63	0	22	1.069	2.0	3	3	1	0	10	2.5	4.5	poor seed stand, gc and knobs in pickouts, surface scab	severe SED	
MSQ035-3	123	188	65	21	65	0	14	1.053	2.0	0	3	0	0	10	2.5	3.0	gc in pickouts, sl surface and pitted scab	severe SED	
<b>MEAN</b>	<b>336</b>	<b>386</b>	<b>86</b>					<b>1.076</b>											tr = trace, sl = slight, N/A = not applicable SED = stem end defect, gc = growth crack

<sup>1</sup> SIZE	<sup>2</sup> TUBER QUALITY (number of tubers per total cut)	<sup>3</sup> CHIP COLOR SCORE - Snack Food Association Scale	<sup>4</sup> VINE VIGOR RATING	<sup>5</sup> VINE MATURITY RATING	Planted:	15-Jun-10
Bs: < 1 7/8"	HH: Hollow Heart	(Out of the field)	Date Taken: 3-Sep-10	Date Taken: 14-Jul-10	Vines Killed:	1-Oct-10
As: 1 7/8" - 3.25"	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Ratings: 1 - 5	Days from Planting to Vine Kill:	108
OV: > 3.25"	IBS: Internal Brown Spot	1: Excellent	1: Slow Emergence	1: Early (vines completely dead)	Seed Spacing:	9.5"
PO: Pickouts	BC: Brown Center	5: Poor	5: Early Emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)	No Fumigation	

<sup>6</sup>MAWN STATION: Coldwater  
Planting to Vine Kill

**2010 Processing Potato Variety Trial**  
**Main Farms, Montcalm County, MI**  
Harvest 13-Sep-10 126 Days  
DD, Base 40<sup>6</sup> 3472

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>3</sup>	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>4</sup>	VINE MATURITY <sup>5</sup>	COMMENTS	CHIP COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO			HH	VD	IBS	BC					
<b>Snowden</b>	<b>624</b>	<b>648</b>	<b>96</b>	<b>2</b>	<b>89</b>	<b>7</b>	<b>2</b>	<b>1.074</b>	<b>1.5</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>3.0</b>	<b>3.0</b>	<b>misshapen pickouts, surface and pitted scab</b>	<b>N/A</b>
MSP515-2	504	519	97	3	77	20	0	1.074	1.5	0	2	0	0	10	2.0	4.5	sl surface and pitted scab	severe VD
MSL292-A	434	471	92	8	92	0	0	1.084	1.0	0	0	0	0	10	2.0	2.5	sl pitted scab	N/A
MSQ035-3	425	459	93	4	82	11	3	1.069	2.0	0	0	0	0	10	2.0	2.5	knob and gc in pickouts, surface scab	N/A
NY139	403	436	93	5	92	1	2	1.074	1.0	0	0	0	0	10	1.0	2.5	sl surface scab, pointed pickouts	N/A
W5015-12	393	449	88	12	88	0	0	1.087	2.0	0	1	0	0	10	2.0	3.5	pitted and surface scab	tr greening
MSL007-B	369	406	91	9	91	0	0	1.071	1.0	0	2	0	0	10	1.5	3.0	small overall size, heavy dark net, sl pitted and surface scab	tr VD
MSR102-3	355	378	94	6	83	11	0	1.059	2.5	0	2	1	0	10	1.0	4.0	sicky stolen, surface scab	N/A
W2310-3	325	373	87	11	87	0	2	1.075	2.0	0	0	1	0	10	2.0	3.0	surface and pitted scab, misshapen pickouts	N/A
FL1879	317	336	95	3	84	11	2	1.074	1.5	5	0	0	0	10	1.5	2.5	sl surface scab	tr VD
MSR061-1	261	307	85	15	85	0	0	1.080	1.5	2	0	0	1	10	2.0	2.5	tr surface scab, dark netting	N/A
MSQ279-1	252	278	91	6	84	7	3	1.076	1.5	0	0	0	0	10	1.5	3.5	misshapen pickouts, tr surface scab, skinning	N/A
<b>Pike</b>	<b>238</b>	<b>282</b>	<b>85</b>	<b>15</b>	<b>83</b>	<b>2</b>	<b>0</b>	<b>1.080</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>2.5</b>	<b>2.5</b>	<b>small overall tuber size, clean appearance</b>	<b>tr SED</b>
MSP459-5	204	294	69	31	68	1	0	1.091	2.0	0	2	0	0	10	3.5	2.5	small size profile, tr surface scab	N/A
MSQ070-1	176	199	89	11	89	0	0	1.082	1.0	0	0	2	0	10	1.0	4.5	small tuber size, tr pitted and surface scab	N/A
MSH228-6	135	150	90	9	90	0	1	1.084	1.0	0	3	0	0	10	3.5	3.5	small tuber number, tr pitted	N/A
<b>MEAN</b>	<b>339</b>	<b>374</b>	<b>90</b>					<b>1.077</b>										

tr = trace, sl = slight, N/A = not applicable  
SED = stem end defect, gc = growth crack

<sup>1</sup> SIZE	<sup>2</sup> TUBER QUALITY (number of tubers per total cut)	<sup>3</sup> CHIP COLOR SCORE - Snack Food Association Scale (Out of the field)	<sup>4</sup> VINE VIGOR RATING	<sup>5</sup> VINE MATURITY RATING	Planted:	10-May-10
Bs: < 1 7/8"	HH: Hollow Heart		Date Taken: 8-Jun-10	Date Taken: 24-Aug-10	Vines Killed:	1-Sep-10
As: 1 7/8" - 3.25"	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Ratings: 1 - 5	Days from Planting to Vine Kill:	114
OV: > 3.25"	IBS: Internal Brown Spot	1: Excellent	1: Slow Emergence	1: Early (vines completely dead)	Seed Spacing:	10"
PO: Pickouts	BC: Brown Center	5: Poor	5: Early Emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)	No Fumigation	

<sup>6</sup>MAWN STATION: Entrican  
Planting to Vine Kill

**2010 Processing Potato Variety Trial**  
**Walther Farms, St. Joseph County, MI**  
Harvest 10-Sep-10 128 Days  
DD, Base 40<sup>6</sup> 3838

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>3</sup>	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>4</sup>	VINE MATURITY <sup>5</sup>	COMMENTS	CHIP COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO			HH	VD	IBS	BC					
FL1879	659	666	99	1	99	0	0	1.080	3.0	3	0	0	0	10	2.5	4.0	heat necrosis in one tuber	SED, severe internal color
Snowden	632	657	96	3	96	0	1	1.088	2.0	3	1	0	0	10	3.0	4.0	heat sprouts	severe SED
MSL007-B	621	631	98	2	98	0	0	1.079	1.0	1	0	0	0	10	2.0	4.0	nice uniform type, heavy netted skin, heat necrosis in two tubers	tr SED
NY139	620	647	96	4	93	3	0	1.092	1.0	1	0	0	0	10	3.0	2.0	heat necrosis in one tuber	severe VD
W2133-1	602	669	90	10	90	0	0	1.091	2.0	0	0	0	0	10	3.5	3.5	heat necrosis in five tubers	VD and severe SED
MSH228-6	594	606	98	2	96	2	0	1.081	1.5	0	0	0	0	10	3.5	3.0	surface scab	severe SED
MSL292-A	584	616	95	5	95	0	0	1.087	1.0	1	0	0	0	10	3.5	2.0	pitted and surface scab, heat necrosis in three tubers	tr SED
MSQ035-3	561	596	94	6	94	0	0	1.063	1.5	0	0	0	0	10	2.5	3.0		SED and VD
W5015-12	544	615	89	11	89	0	0	1.089	1.5	1	0	0	0	10	3.5	3.5	heat necrosis in five tubers	sl SED
A00188-3C	525	591	89	7	89	0	4	1.082	1.5	0	0	0	0	10	4.0	2.5		severe SED
CO00197-3W	510	619	82	14	82	0	4	1.079	1.0	0	0	0	0	10	4.0	3.0		tr VD
MSP515-2	488	531	92	8	92	0	0	1.078	1.5	0	0	0	0	10	3.0	4.5	uniform tuber type	sl SED
W2978-3	486	536	91	4	91	0	5	1.077	1.5	1	2	0	0	10	2.0	3.0	sl surface scab, sl gc, heat necrosis in one tuber	severe SED
CO00188-4W	449	536	84	16	84	0	0	1.084	1.0	0	0	0	0	10	3.5	2.0	small tuber type	
A01143-3C	448	481	93	5	93	0	2	1.082	1.5	0	0	0	0	10	3.5	3.0		significant VD
W2717-5	438	477	92	5	92	0	3	1.099	1.0	2	0	0	0	10	3.0	2.5	oval to oblong tuber type, 1 gc	sl SED
Pike	398	439	91	6	91	0	3	1.082	1.0	0	0	0	0	10	2.5	3.5	heat necrosis in two tubers	tr heat necrosis
W2310-3	382	496	77	10	77	0	13	1.083	1.0	0	1	0	0	10	3.5	3.0	heat necrosis in one tuber, not uniform tuber type	tr SED
MSQ070-1	359	451	80	12	80	0	8	1.091	1.0	1	0	0	0	10	2.5	4.0		tr SED
MSQ279-1	357	385	93	7	86	7	0	1.074	1.5	1	0	0	0	10	3.0	3.5	heat necrosis in two tubers, heat sprouts, deep apical eyes	tr SED
MSP459-5	287	349	82	18	82	0	0	1.082	1.5	1	0	0	0	10	3.0	2.5		severe SED, heat necrosis
MSR102-3	257	288	89	3	89	0	8	1.084	3.0	0	0	0	0	10	3.0	4.5	heat sprouts	VD and severe SED
MSR061-1	231	279	83	17	83	0	0	1.084	1.5	0	0	0	0	10	2.5	3.0	heavy netted skin	sl SED
CO95051-7W	111	214	52	35	52	0	13	1.076	1.0	0	2	0	0	10	2.0	4.0	growth cracks, small tuber size	
<b>MEAN</b>	<b>464</b>	<b>516</b>	<b>88</b>					<b>1.083</b>										

tr = trace, sl = slight, N/A = not applicable  
SED = stem end defect, gc = growth crack

<sup>1</sup> SIZE	<sup>2</sup> TUBER QUALITY (number of tubers per total cut)	<sup>3</sup> CHIP COLOR SCORE - Snack Food Association Scale	<sup>4</sup> VINE VIGOR RATING	<sup>5</sup> VINE MATURITY RATING	Planted:	5-May-10
Bs: < 1 7/8"	HH: Hollow Heart	(Out of the field)	Date Taken: 28-Jun-10	Date Taken: 3-Sep-10	Vines Killed:	7-Sep-10
As: 1 7/8" - 3.25"	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Ratings: 1 - 5	Days from Planting to Vine Kill:	125
OV: > 3.25"	IBS: Internal Brown Spot	1: Excellent	1: Slow Emergence	1: Early (vines completely dead)	Seed Spacing:	10"
PO: Pickouts	BC: Brown Center	5: Poor	5: Early Emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)	No Fumigation	

<sup>6</sup>MAWN STATION: Constantine  
Planting to Vine Kill

## 2010 "Select" Processing Potato Variety Trial Overall Average - Crooks Farms, Inc., Two Locations Klees & Musson Roads, Montcalm County, MI

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>3</sup>	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>4</sup>	VINE MATURITY <sup>5</sup>	COMMENTS	CHIP COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO			HH	VD	IBS	BC					
W5015-12	631	711	89	11	82	7	0	1.084	1.0	1	2	1	0	10	3.3	3.5	tr pitted scab, nice tuber type, heavy netted skin	
MSL292-A	450	510	88	12	83	5	0	1.073	1.0	1	1	0	0	10	3.8	2.8	nice tuber type, tr pitted scab	tr SED
Pike	431	482	89	10	85	4	1	1.083	1.0	1	2	0	0	10	4.5	1.5	tr pitted and surface scab, uniform type	tr SED
MSQ070-1	430	487	88	11	87	1	1	1.081	1.0	1	2	1	1	10	3.3	3.5	surface scab, uniform type, sticky stolons	tr SED
NY139	393	426	91	8	88	3	1	1.078	1.0	0	3	0	0	10	3.3	3.0	surface scab, pear shape tubers	tr SED
W2310-3	385	442	88	11	86	2	1	1.080	1.3	1	1	0	0	10	3.5	3.0	surface and pitted scab	sl SED
W2717-5	240	290	81	18	81	0	1	1.073	1.0	0	4	0	0	10	3.8	3.3	pitted scab, gc in pickouts, severe VD	
<b>MEAN</b>	<b>423</b>	<b>478</b>	<b>88</b>					<b>1.079</b>										

tr = trace, sl = slight, N/A = not applicable  
SED = stem end defect, gc = growth crack

<sup>1</sup> SIZE	<sup>2</sup> TUBER QUALITY (number of tubers per total cut)	<sup>3</sup> CHIP COLOR SCORE - Snack Food Association Scale	<sup>4</sup> VINE VIGOR RATING	<sup>5</sup> VINE MATURITY RATING
Bs: < 1 7/8"	HH: Hollow Heart	(Out of the field)	Date Taken: N/A	Date Taken: N/A
As: 1 7/8" - 3.25"	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Ratings: 1 - 5
OV: > 3.25"	IBS: Internal Brown Spot	1: Excellent	1: Slow Emergence	1: Early (vines completely dead)
PO: Pickouts	BC: Brown Center	5: Poor	5: Early Emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)

**2010 "Select" Processing Potato Variety Trial**  
**Crooks Farms, Klees Rd., Montcalm County, MI**  
 Harvest 14-Sep-10      133 Days  
 DD, Base 40<sup>6</sup>      3370

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>				SP GR	CHIP SCORE <sup>3</sup>	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>4</sup>	VINE MATURITY <sup>5</sup>	COMMENTS	CHIP COMMENTS	
	US#1	TOTAL	US#1	Bs	As	OV			PO	HH	VD	IBS						BC
W5015-12	601	681	88	12	85	3	0	1.085	1.0	0	2	1	0	10	2.5	3.5	flattened tuber type, heavy netted skin	
MSL292-A	521	585	89	11	88	1	0	1.071	1.0	0	0	0	0	10	4.5	2.5	pitted and surface scab, uniform type	
NY139	457	480	95	5	88	7	0	1.082	1.0	0	3	0	0	10	3.0	2.5	raised surface scab	tr SED
<b>Pike</b>	<b>431</b>	<b>482</b>	<b>89</b>	<b>10</b>	<b>85</b>	<b>4</b>	<b>1</b>	<b>1.083</b>	<b>1.0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>4.5</b>	<b>1.5</b>	<b>tr pitted and surface scab, uniform type</b>	<b>tr SED</b>
MSQ070-1	411	473	87	13	87	0	0	1.085	1.0	0	2	1	1	10	3.5	3.5	surface scab, uniform type, sticky stolons	tr SED
W2310-3	402	452	89	10	88	1	1	1.077	1.0	1	2	0	0	10	3.0	2.5	pitted and surface scab	
W2717-5	351	416	84	16	84	0	0	1.077	1.0	0	1	0	0	10	3.5	2.5	deep pitted scab	
<b>MEAN</b>	<b>453</b>	<b>510</b>	<b>89</b>					<b>1.080</b>										

tr = trace, sl = slight, N/A = not applicable  
 SED = stem end defect, gc = growth crack

<sup>1</sup> SIZE	<sup>2</sup> TUBER QUALITY (number of tubers per total cut)	<sup>3</sup> CHIP COLOR SCORE - Snack Food Association Scale	<sup>4</sup> VINE VIGOR RATING	<sup>5</sup> VINE MATURITY RATING	Planted:	4-May-10
Bs: < 1 7/8"	HH: Hollow Heart	(Out of the field)	Date Taken: 8-Jun-10	Date Taken: 17-Aug-10	Vines Killed:	1-Sep-10
As: 1 7/8" - 3.25"	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Ratings: 1 - 5	Days from Planting to Vine Kill:	120
OV: > 3.25"	IBS: Internal Brown Spot	1: Excellent	1: Slow Emergence	1: Early (vines completely dead)	Seed Spacing :	10"
PO: Pickouts	BC: Brown Center	5: Poor	5: Early Emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)	No Fumigation	

<sup>6</sup>MAWN STATION: Entrican  
 Planting to Vine Kill

**2010 "Select" Processing Potato Variety Trial**  
**Crooks Farms, Musson Rd., Montcalm County, MI**  
 Harvest 5-Oct-10 134 Days  
 DD, Base 40<sup>6</sup> 3352

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>3</sup>	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>4</sup>	VINE MATURITY <sup>5</sup>	COMMENTS	CHIP COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO			HH	VD	IBS	BC					
W5015-12	661	740	89	11	79	10	0	1.084	1.0	1	1	0	0	10	4.0	3.5	tr pitted scab, nice tuber type, heavy netted skin	
<b>FL1833</b>	<b>556</b>	<b>586</b>	<b>95</b>	<b>4</b>	<b>90</b>	<b>5</b>	<b>1</b>	<b>1.083</b>	<b>1.0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>3.5</b>	<b>3.5</b>	<b>tr pitted scab</b>	<b>tr SED</b>
MSQ070-1	449	501	90	9	87	3	1	1.077	1.0	1	2	0	1	10	3.0	3.5	sl surface scab, nice round tuber type, tr sticky stolons, tr heat sprouts, tr gc and knobs in pickouts	sl SED
MSL292-A	379	434	87	13	79	8	0	1.075	1.0	1	2	0	0	10	3.0	3.0	nice tuber type, tr pitted scab	tr SED
W2310-3	368	431	86	13	84	2	1	1.083	1.5	0	0	0	0	10	4.0	3.5	surface and pitted scab	sl SED
NY139	328	372	88	10	88	0	2	1.074	1.0	0	2	0	0	10	3.5	3.5	surface scab, pear shape tubers	
W2717-5	128	165	78	21	78	0	1	1.069	1.0	0	6	0	0	10	4.0	4.0	pitted scab, gc in pickouts, severe VD	
<b>MEAN</b>	<b>410</b>	<b>461</b>	<b>88</b>					<b>1.078</b>										

tr = trace, sl = slight, N/A = not applicable  
 SED = stem end defect, gc = growth crack

<sup>1</sup> SIZE	<sup>2</sup> TUBER QUALITY (number of tubers per total cut)	<sup>3</sup> CHIP COLOR SCORE - Snack Food Association Scale (Out of the field)	<sup>4</sup> VINE VIGOR RATING	<sup>5</sup> VINE MATURITY RATING	Planted:	24-May-10
Bs: < 1 7/8"	HH: Hollow Heart		Date Taken: 21-Jun-10	Date Taken: 30-Aug-10	Vines Killed:	15-Sep-10
As: 1 7/8" - 3.25"	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Ratings: 1 - 5	Days from Planting to Vine Kill:	114
OV: > 3.25"	IBS: Internal Brown Spot	1: Excellent	1: Slow Emergence	1: Early (vines completely dead)	Seed Spacing :	10"
PO: Pickouts	BC: Brown Center	5: Poor	5: Early Emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)	No Fumigation	

<sup>6</sup>MAWN STATION: Entrican  
 Planting to Vine Kill

**2010 MPIC Box Bin Processing Potato Variety Trial**  
**Montcalm Research Farm, Montcalm County, MI**  
Harvest 28-Sep-10 141 Days  
DD, Base 40<sup>6</sup> 3816

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>3</sup>	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>4</sup>	VINE MATURITY <sup>5</sup>	COMMENTS	CHIP COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO			HH	VD	IBS	BC					
MSP515-2	519	554	94	6	72	22	0	1.077	1.5	1	1	0	0	10	2.0	4.0	large tuber size	sl SED
A01143-3C	442	613	72	12	72	0	16	1.077	1.0	0	0	3	0	10	2.5	4.5	severe heat sprouts, knobs	tr SED
MSQ279-1	384	417	92	6	83	9	2	1.073	1.5	1	0	1	0	10	1.5	4.0		SED
NY139	382	422	90	10	81	9	0	1.085	1.0	0	0	0	0	10	2.5	3.0	smooth oval flattened tubers	tr SED
AF2291-10	381	449	85	13	77	8	2	1.085	1.5	2	6	0	0	10	1.5	2.5	not uniform type, tr points	sl SED, some HH
<b>Snowden</b>	<b>346</b>	<b>401</b>	<b>86</b>	<b>13</b>	<b>77</b>	<b>9</b>	<b>1</b>	<b>1.083</b>	<b>1.0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>2.0</b>	<b>3.0</b>		<b>tr SED</b>
MSH228-6	346	377	91	7	70	21	2	1.074	1.5	0	5	0	0	10	1.0	3.0	large tuber size	SED
A00188-3C	339	445	76	24	75	1	0	1.082	1.0	0	7	0	0	10	2.5	2.5	small uniform tuber type	sl SED
W5015-12	331	419	79	14	63	16	7	1.077	1.0	6	4	0	0	10	1.0	4.0	surface and pitted scab, large tuber size	VD
MSL007-B	319	381	84	16	80	4	0	1.078	1.0	1	1	0	0	10	1.5	2.5	heavy netted skin, uniform tuber type	
MSR102-3	297	345	86	13	80	6	1	1.079	1.5	0	4	0	0	10	1.5	5.0	sticky stolons	SED
W2978-3	295	369	80	18	77	3	2	1.072	1.5	0	3	0	0	10	2.5	1.5	bright tuber appearance	tr SED
MSP459-5	291	386	75	25	75	0	0	1.070	1.0	0	2	0	0	10	2.0	2.5	netted skin, uniform tuber type	tr SED
W2310-3	268	353	76	17	76	0	7	1.087	1.0	0	1	0	0	10	1.5	3.0	misshapen tubers in pickouts, surface and pitted scab	tr SED
MSP270-1	252	304	83	17	80	3	0	1.074	1.0	0	1	1	0	10	1.0	3.5	netted skin, uniform type	
MSL292-A	244	344	71	29	71	0	0	1.074	1.0	0	2	0	0	10	2.0	2.5	uniform type	tr SED
W2717-5	212	263	81	17	79	2	2	1.087	1.0	1	2	0	2	10	2.0	1.5		sl SED
MSQ070-1	211	255	83	17	77	6	0	1.085	1.5	2	2	3	0	10	1.0	4.5	sticky stolons	tr SED
MSR061-1	195	255	76	24	76	0	0	1.076	1.0	0	0	0	0	10	1.0	3.0	netted skin, uniform type	tr SED
CO00188-4W	185	313	59	41	59	0	0	1.069	1.0	0	2	0	0	10	3.0	2.5	small uniform tuber type	
CO00197-3W	87	144	61	37	61	0	2	1.066	1.0	1	3	0	0	10	2.0	4.0	small tuber yield	tr SED

MEAN 301 372 80

1.078

tr = trace, sl = slight, N/A = not applicable

SED = stem end defect, gc = growth crack

<sup>1</sup>SIZE \_\_\_\_\_  
Bs: < 1 7/8"  
As: 1 7/8" - 3.25"  
OV: > 3.25"  
PO: Pickouts

<sup>2</sup>TUBER QUALITY (number of tubers per total cut)  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>3</sup>CHIP COLOR SCORE - Snack Food Association Scale (Out of the field)  
Ratings: 1 - 5  
1: Excellent  
5: Poor

<sup>4</sup>VINE VIGOR RATING  
Date Taken: 8-Jun-10  
Ratings: 1 - 5  
1: Slow Emergence  
5: Early Emergence (vigorous vine, some flowering)

<sup>5</sup>VINE MATURITY RATING  
Date Taken: 24-Aug-10  
Ratings: 1 - 5  
1: Early (vines completely dead)  
5: Late (vigorous vine, some flowering)  
Planted: 10-May-10  
Vines Killed: 7-Sep-10  
Days from Planting to Vine Kill: 120  
Seed Spacing: 10"  
No Fumigation

<sup>6</sup>MAWN STATION: Entrican Planting to Vine Kill

**2010 USBP / SFA Processing Potato Variety Trial**  
**Sandyland Farms, Mecosta County, MI**  
Harvest 8-Oct-10 140 Days  
DD, Base 40<sup>6</sup> 3327

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>						SP GR	CHIP SCORE <sup>3</sup>	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>4</sup>	VINE MATURITY <sup>5</sup>	COMMENTS	CHIP COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	HH			VD	IBS	BC						
AF2291-10	506	565	90	4	74	16	6	1.081	1.0	2	5	0	0	30	3.0	3.5	sl rough and misshapen type	SED	
W5015-12	498	565	89	11	78	11	0	1.080	1.0	3	5	6	0	30	3.0	3.0	surface and pitted scab, flattened tuber type	SED	
<b>Snowden</b>	<b>463</b>	<b>510</b>	<b>90</b>	<b>10</b>	<b>82</b>	<b>8</b>	<b>0</b>	<b>1.077</b>	<b>1.0</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>3.5</b>	<b>3.5</b>			
MSL292-A	457	490	93	7	79	14	0	1.071	1.0	0	5	0	0	30	3.5	3.0	sl surface and pitted scab		
NY138	444	471	94	6	82	12	0	1.071	1.0	1	5	0	0	30	3.0	3.0			
<b>Atlantic</b>	<b>443</b>	<b>472</b>	<b>94</b>	<b>6</b>	<b>82</b>	<b>12</b>	<b>0</b>	<b>1.082</b>	<b>1.5</b>	<b>8</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>30</b>	<b>3.0</b>	<b>3.5</b>	<b>surface and pitted scab</b>	<b>SED, VD</b>	
NY139	428	469	91	8	80	11	1	1.076	1.0	0	2	0	0	30	4.0	3.5	points and elongated type		
W2310-3	418	479	87	6	78	9	7	1.082	1.0	0	3	0	1	30	3.5	3.0	misshapen pickouts, flat tuber type		
MSQ279-1*	413	447	92	7	79	13	1	1.072	1.0	0	0	0	0	10	3.5	3.5		SED	
W2978-3	392	434	91	9	82	9	0	1.064	1.0	0	2	0	0	30	3.5	2.0	surface and pitted scab	SED	
CO97065-7W	344	377	91	8	81	10	1	1.070	1.0	9	1	0	1	30	3.5	1.5	surface and pitted scab		
MSJ126-9Y	285	336	84	16	81	3	0	1.065	1.0	0	3	0	0	30	2.5	2.5	uniform type		
CO97043-14W	265	305	87	13	80	7	0	1.065	1.0	0	7	0	0	30	3.0	3.0	surface and pitted scab		
W2717-5	258	300	86	13	84	2	1	1.080	1.0	3	7	0	0	30	4.0	3.0	surface and pitted scab		
CO95051-7W*	236	339	70	24	70	0	6	1.073	1.0	1	0	1	0	10	2.5	3.0	tr misshapen tubers	SED	
<b>MEAN</b>	<b>390</b>	<b>437</b>	<b>89</b>					<b>1.074</b>											

tr = trace, sl = slight, N/A = not applicable  
SED = stem end defect, gc = growth crack

<sup>1</sup> SIZE	<sup>2</sup> TUBER QUALITY (number of tubers per total cut)	<sup>3</sup> CHIP COLOR SCORE - Snack Food Association Scale	<sup>4</sup> VINE VIGOR RATING	<sup>5</sup> VINE MATURITY RATING	Planted:	21-May-10
Bs: < 1 7/8"	HH: Hollow Heart	(Out of the field)	Date Taken: 21-Jun-10	Date Taken: 24-Aug-10	Vines Killed:	9-Sep-10
As: 1 7/8" - 3.25"	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Ratings: 1 - 5	Days from Planting to Vine Kill:	111
OV: > 3.25"	IBS: Internal Brown Spot	1: Excellent	1: Slow Emergence	1: Early (vines completely dead)	Seed Spacing:	10"
PO: Pickouts	BC: Brown Center	5: Poor	5: Early Emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)	Fall Fumigation	
					* = denotes additional varieties not a part of the USBP/SFA Trial	<sup>6</sup> MAWN STATION: Entrican Planting to Vine Kill

# 2010 MSU Tablestock Potato Variety Trials

Entry	Pedigree	2010 Scab Rating*	Characteristics
Classic Russet (A95109-1Rus)	Blazer Russet X Summit Russet	1.3**	Medium yield, early maturity, attractive appearance, high percentage of US#1's, fresh market use, low - medium specific gravity, resistant to fusarium dry rot and common scab, some tuber storage rot and blackleg susceptibility reported
Colorado Rose	NDTX9-1068-11R X NT6063-1R	3.5	High yield, oval to oblong tubers, smooth red skin, shallow eyes, medium maturity
GoldRush (ND1538-1Rus)	ND450-3Rus X Lemhi Russet	1.0	Long to oval tubers, heavy russet, check variety
Onaway	USDA X96-56 X Katahdin	2.1	High yield, early maturity, round tuber type, low specific gravity, smooth skin, white flesh, medium deep eyes, few internal defects, check variety
Reba (NY 87)	Monona X Allegany	2.5	High yield, bright tubers, low incidence of internal defects, mid to late season maturity, medium – low specific gravity
Russet Norkotah (ND534-4Rus)	ND9526-4Rus X ND9687-5Rus	2.3	Medium yield, mid-season maturity, long to oval tubers, heavy russet skin, check variety, low specific gravity
Silverton Russet (AC83064-6)	A76147-2 X A 7875-5	1.0	High yield, oblong to long blocky tuber type, medium russet skin, masks PVY, medium specific gravity, possible Sencor & Linuron susceptibility
A98134-2Rus	A86707 X A9201-6	-	Medium yield, early to mid-season maturity, medium specific gravity, heavy russetting
A98289-1Rus	A9396-1 X Premier Russet	0.5	Yields similar to Russet Norkotah but higher US No.1 count, heavily russeted, bright eyes
A01124-3Rus	Bannock Russet X A94020-3	1.5	Medium yield, early to mid-season maturity, medium specific gravity, heavy russetting, nice uniform blocky tuber appearance

\*Scab rating based on 0-5 scale; 0 = most resistant and 5 = most susceptible. \*\* 2009 data

<b>Entry</b>	<b>Pedigree</b>	<b>2010 Scab Rating*</b>	<b>Characteristics</b>
A0008-1TERus	Blazer Russet X Classic Russet	-	Medium yield, nice blocky tuber type, white flesh, medium russet skin, early maturity, low specific gravity
CO99256-2R	Rio Colorado X Colorado Rose	2.8	Medium to late maturity, oval tuber type, strong red skin color
CO99053-3Rus	AC91014-2 X Silverton Russet	2.0	High yield, medium to late maturity, large vine, medium specific gravity, uniform blocky tubers, medium russeting, nice appearance, blackspot resistant
CO00291-5R	CO94019-1R X Rio Colorado	2.5	Medium yield, uniform round tubers, late maturity, dark red skin color
MSL211-3	MSG301-9 x Jacqueline Lee (MSG274-3)	2.2	Round to oval tubers, smooth bright appearance, moderate late blight resistance, good yield
MSL268-D	NY103 X Jacqueline Lee	3.0	Medium – high yield, late blight resistance, round to oval tuber type
MSM182-1	Stirling X NY121	3.0	PVY & late blight resistance, low specific gravity, smaller size profile
MSQ176-5	MSI152-A X Missaukee (MSJ461-1)	3.0	High yield potential, uniform round tuber type, bright appearance, late blight resistance, good bulking
MSQ440-2	MSK214-1R X Missaukee (MSJ461-1)	1.8	Uniform round tubers, very bright white skin, common scab resistant
MSR217-1R	NDTX4271-5R X Missaukee (MSJ461-1)	2.0	Attractive dark red skin, round tuber type
MSS544-1R	CO93037-6R X MNR-8RR	1.0	Attractive dark red skin, round tuber type, common scab resistance
W2609-1R	Dark Red Norland X W774R	1.0	Some common scab tolerance, moderate red skin color, uniform round type

\*Scab rating based on 0-5 scale; 0 = most resistant and 5 = most susceptible.

<b>Entry</b>	<b>Pedigree</b>	<b>2010 Scab Rating*</b>	<b>Characteristics</b>
W2683-2Rus	ND4093-4 X CO80011-5	1.0	Good yield, high percent of oversize, good internal quality, blackspot resistant, common scab resistance, medium low specific gravity, tuber shape may not be consistent
W5767-1R	MN96101-1 X MN86105	2.0	Dark red skin, white flesh, large tuber size, high yield potential, medium deep eyes, large vine, medium late maturity
W6234-4Rus	Umatilla Russet X A9014-2	3.5	Large vine type, blocky tubers, very light russet skin, high specific gravity
W8946-1Rus	PA98V1-2 X AOA95154-1	1.3	Medium yield potential, medium specific gravity, possibly susceptible to heat stress

\*Scab rating based on 0-5 scale; 0 = most resistant and 5 = most susceptible.

# 2010 Freshpack Potato Variety Trial

## Overall Averages - Seven Locations

### Branch, Delta, Kalkaska, Monroe, Montcalm, Newaygo & Presque Isle

NUMBER OF LOCATIONS	LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>				SP GR	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>3</sup>	VINE MATURITY <sup>4</sup>	COMMENTS	4-YR AVG	
		US#1	TOTAL	US#1	Bs	As	OV		PO	HH	VD	IBS					BC	US#1
1	Classic Russet	592	636	93	1	24	69	6	1.077	1	0	0	0	10	3.5	4.5	large percent of oversize	423
3	W5767-1R	453	498	91	6	77	14	3	1.071	0	5	0	0	30	4.5	2.2	surface scab, sl netted skin, tr gc, misshapen pickouts	435* *
3	Colorado Rose	450	525	85	9	65	20	6	1.068	0	4	0	0	30	4.0	2.2	misshapen pickouts, surface and pitted scab, oblong tuber type, tr soft rot	450*
4	MSQ176-5	442	486	89	8	56	33	3	1.063	2	4	2	0	40	2.9	3.0	surface and pitted scab, gc in pickouts, nice tuber type, sl netted skin, bright appearance	435* *
7	<b>Silverton Russet</b>	<b>441</b>	<b>519</b>	<b>85</b>	<b>10</b>	<b>58</b>	<b>27</b>	<b>5</b>	<b>1.069</b>	<b>3</b>	<b>8</b>	<b>1</b>	<b>7</b>	<b>70</b>	<b>2.7</b>	<b>3.1</b>	<b>misshapen pickouts, sl alligator hide</b>	<b>397</b>
4	CO99265-2R	440	505	87	11	82	5	2	1.073	1	9	0	0	40	3.3	3.2	surface and pitted scab, oval to oblong tuber type, good red color	443* *
4	<b>Reba</b>	<b>440</b>	<b>476</b>	<b>92</b>	<b>6</b>	<b>78</b>	<b>14</b>	<b>2</b>	<b>1.072</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>3.8</b>	<b>2.3</b>	<b>tr surface and pitted scab, deep apical eye, gc in pickouts, oblong tuber type</b>	<b>427</b>
3	<b>Onaway</b>	<b>417</b>	<b>487</b>	<b>78</b>	<b>17</b>	<b>61</b>	<b>17</b>	<b>5</b>	<b>1.066</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>4.7</b>	<b>1.5</b>	<b>bright appearance, sl deep eye, gc and misshapen in pickouts, tr surface and pitted scab</b>	<b>374</b>
4	MSL268-D	393	465	84	10	77	7	6	1.080	3	13	0	0	40	3.8	3.1	tr surface and pitted scab, knobs in pickouts, buff / netted appearance	385
4	MSL211-3	369	432	84	12	77	7	4	1.069	0	4	0	0	40	4.3	2.1	smooth bright appearance, gc and misshapen tubers in pickouts, tr surface scab	369*
5	CO99053-3RUS	368	500	74	13	51	23	13	1.075	8	6	1	0	50	2.6	4.1	not uniform type, alligator hide, large tuber size	433* **
4	MSM182-1	352	421	83	14	79	4	3	1.070	3	2	4	2	40	3.9	2.5	tr pitted scab, netted skin, severe heat necrosis	402* **
2	A98134-2RUS	350	543	66	26	61	5	8	1.075	0	5	1	0	20	3.0	2.3	misshapen in pickouts, tr gc, alligator hide, type not uniform	350*
3	CO00291-5R	348	394	88	6	83	5	6	1.066	6	3	0	0	30	2.7	4.5	surface and pitted scab, misshapen pickouts, sticky stolons	348*

NUMBER OF LOCATIONS	LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>				SP GR	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>3</sup>	VINE MATURITY <sup>4</sup>	COMMENTS	4-YR AVG US#1 CWT/A	
		US#1	TOTAL	US#1	Bs	As	OV		PO	HH	VD	IBS						BC
3	W2609-1R	345	384	89	10	86	3	1	1.061	0	4	0	1	30	3.8	1.0	surface and pitted scab, gc in pickouts, light red skin color	345*
1	A98289-1RUS	332	431	77	17	73	4	6	1.070	0	3	0	0	10	1.0	1.5	gc and misshapen in pickouts, severe blackleg rot in plot	393* *
5	W6234-4RUS	323	447	70	23	54	16	7	1.078	2	8	0	0	50	3.1	2.1	tr surface scab, light russetting, misshapen pickouts, heat sprouts, heat necrosis in two tubers	323*
2	A01124-3RUS	322	502	64	30	56	8	6	1.072	3	0	2	1	20	1.3	2.5	misshapen pickouts, heavy russetting	322*
3	MSR217-1R	286	315	90	9	81	9	1	1.059	0	3	1	0	30	2.2	1.3	surface and pitted scab, dark red skin color, uniform round type, tr gc in pickouts	286*
4	MSQ440-2	279	333	82	17	76	6	1	1.058	0	20	1	0	40	3.0	2.4	1 glassy end, sl surface scab, some heat sprouts, bright appearance	279*
5	W8946-1RUS	276	496	56	28	54	2	16	1.087	2	4	6	0	50	3.1	3.6	sl surface scab, severe heat sprouts in pickouts	276*
6	<b>Russet Norkotah</b>	<b>266</b>	<b>396</b>	<b>65</b>	<b>27</b>	<b>54</b>	<b>11</b>	<b>8</b>	<b>1.066</b>	<b>0</b>	<b>13</b>	<b>1</b>	<b>0</b>	<b>60</b>	<b>2.8</b>	<b>1.6</b>	<b>alligator hide, uniform type, misshapen and knobs in pickouts</b>	<b>325</b>
3	<b>GoldRush</b>	<b>260</b>	<b>434</b>	<b>62</b>	<b>20</b>	<b>57</b>	<b>5</b>	<b>18</b>	<b>1.068</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>1.3</b>	<b>1.7</b>	<b>misshapen pickouts, heavy russetting</b>	<b>358* **</b>
1	MSS544-1R	229	308	74	20	65	9	6	1.064	0	2	0	0	10	2.5	2.0	tr surface scab, misshapen pickouts, one tuber with severe VD	229*
4	W2683-2RUS	217	386	54	26	45	9	20	1.073	3	4	4	0	40	2.4	3.1	gc and misshapen tubers in pickouts	328* *
1	A0008-1TE	209	348	60	18	48	12	22	1.063	6	0	0	0	10	1.0	2.0	many gc and misshapen in pickouts, alligator hide	323* *

MEAN

354

449

1.070

tr = trace, sl = slight, N/A = not applicable

SED = stem end defect, gc = growth crack

<sup>1</sup>SIZE

Bs: < 1 7/8" or < 4 oz.

As: 1 7/8" - 3.25" or 4 - 10 oz.

OV: > 3.25" or > 10 oz.

PO: Pickouts

<sup>2</sup>TUBER QUALITY (number of tubers per total cut)

HH: Hollow Heart

VD: Vascular Discoloration

IBS: Internal Brown Spot

BC: Brown Center

<sup>3</sup>VINE VIGOR RATING

Date Taken: N/A

Ratings: 1 - 5

1: Slow Emergence

5: Early Emergence (vigorous vine, some flowering)

<sup>4</sup>MATURITY RATING

Date Taken: N/A

Ratings: 1 - 5

1: Early (vines completely dead)

5: Late (vigorous vine, some flowering)

\*One-Year Average

\*\*Two-Year Average

\*\*\*Three-Year Average



## 2010 Freshpack Potato Variety Trial Horkey Brothers, Monroe County, MI

Harvest **9-Sep-10**                      **141** Days  
DD, Base 40<sup>5</sup>                                      **3216**

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>3</sup>	VINE MATURITY <sup>4</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO		HH	VD	IBS	BC				
MSL211-3	338	420	80	17	79	1	3	1.074	0	1	0	0	10	5.0	1.5	heat sprouts, pitted and surface scab
MSM182-1	287	385	75	25	75	0	0	1.069	0	0	0	0	10	4.5	1.5	surface scab, netted skin, 4 tubers with heat necrosis
<b>Reba</b>	<b>274</b>	<b>303</b>	<b>90</b>	<b>10</b>	<b>88</b>	<b>2</b>	<b>0</b>	<b>1.076</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>3.5</b>	<b>1.5</b>	<b>5 tubers with heat necrosis</b>
MSL268-D	258	316	82	18	82	0	0	1.079	0	5	0	0	10	4.5	2.5	tr surface and pitted scab
MSQ176-5	223	293	76	19	73	3	5	1.055	0	2	0	0	10	3.5	1.5	surface and pitted scab
MSQ440-2	155	224	69	31	69	0	0	1.052	0	8	0	0	10	3.0	1.5	1 glassy end, sl surface scab, some heat sprouts on 3 tubers
<b>Onaway</b>	<b>112</b>	<b>199</b>	<b>56</b>	<b>37</b>	<b>56</b>	<b>0</b>	<b>7</b>	<b>1.063</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>5.0</b>	<b>1.0</b>	<b>small overall size, tr blackleg, tr pitted scab</b>
<b>MEAN</b>	<b>235</b>	<b>306</b>	<b>75</b>					<b>1.067</b>								tr = trace, sl = slight, N/A = not applicable SED = stem end defect, gc = growth crack

<sup>1</sup> SIZE	<sup>2</sup> TUBER QUALITY (number of tubers per total cut)	<sup>3</sup> VINE VIGOR RATING	<sup>4</sup> VINE MATURITY RATING	Planted:	21-Apr-10
Bs: < 1 7/8" or < 4 oz.	HH: Hollow Heart	Date Taken: 14-Jun-10	Date Taken: 13-Aug-10	Vines Killed:	14-Aug-10
As: 1 7/8" - 3.25" or 4 - 10 oz.	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Days from Planting to Vine Kill:	115
OV: > 3.25" or > 10 oz.	IBS: Internal Brown Spot	1: Slow Emergence	1: Early (vines completely dead)	Seed Spacing :	7"
PO: Pickouts	BC: Brown Center	5: Early Emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)	No Fumigation	<sup>5</sup> MAWN STATION: Petersburg Planting to Vine Kill

# 2010 Freshpack Potato Variety Trial R & E Farms, Presque Isle County, MI

Harvest 4-Oct-10      138 Days  
DD, Base 40<sup>5</sup>      3133

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>3</sup>	VINE MATURITY <sup>4</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO		HH	VD	IBS	BC				
MSQ176-5	618	657	94	4	50	44	2	1.068	2	0	2	0	10	3.0	4.0	large tuber size, netted skin
CO99053-3RUS	523	737	71	7	35	36	22	1.075	3	2	0	0	10	2.5	5.0	sticky stolons, alligator hide, large tuber size
MSL268-D	485	543	90	5	74	16	5	1.084	2	5	0	0	10	3.5	3.5	sl surface and pitted scab, netted skin
<b>Silverton Russet (Plot)</b>	<b>458</b>	<b>558</b>	<b>82</b>	<b>10</b>	<b>61</b>	<b>21</b>	<b>8</b>	<b>1.069</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>2.5</b>	<b>3.5</b>	<b>misshapen pickouts, sl alligator hide</b>
<b>Onaway</b>	<b>441</b>	<b>493</b>	<b>90</b>	<b>7</b>	<b>85</b>	<b>5</b>	<b>3</b>	<b>1.065</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>4.0</b>	<b>1.0</b>	<b>bright appearance, sl deep eye, gc and misshapen in pickouts, tr surface and pitted scab</b>
CO99265-2R (Leer Rd.)	434	519	83	15	81	2	2	1.073	0	6	0	0	10	2.5	N/A	misshapen pickouts, nice red color
Silverton Russet (Field, Plus Foliar)	425	490	87	11	69	18	2	1.071	0	2	1	0	10	N/A	N/A	
<b>Reba</b>	<b>421</b>	<b>449</b>	<b>94</b>	<b>5</b>	<b>87</b>	<b>7</b>	<b>1</b>	<b>1.070</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>3.5</b>	<b>2.5</b>	<b>tr surface and pitted scab</b>
W5767-1R	417	465	89	9	73	16	2	1.069	0	3	0	0	10	4.5	2.0	surface scab, sl netted skin, tr gc, misshapen pickouts
Colorado Rose	405	529	76	13	72	4	11	1.074	0	2	0	0	10	3.5	2.5	misshapen pickouts, surface and pitted scab, oblong tuber type, tr soft rot
CO99256-2R (Plot)	394	448	88	10	85	3	2	1.076	1	1	0	0	10	3.0	4.5	surface and pitted scab
Silverton Russet (Field, No Foliar)	393	447	88	8	54	34	4	1.072	0	3	0	0	10	N/A	N/A	misshapen pickouts
W8946-1RUS	375	541	69	22	69	0	9	1.090	0	0	1	0	10	3.5	4.5	points in pickouts
W2609-1R	371	398	93	6	92	1	1	1.066	0	1	0	0	10	3.5	1.0	surface and pitted scab
CO00291-5R	368	407	90	6	80	10	4	1.065	5	0	0	0	10	2.5	5.0	surface and pitted scab, misshapen pickouts, sticky stolons
MSM182-1	293	360	82	11	74	8	7	1.073	0	0	1	0	10	3.5	3.5	misshapen pickouts, tr gc, sl netted skin
MSQ440-2	278	326	85	13	85	0	2	1.063	0	5	0	0	10	3.0	2.5	tr surface scab
MSR217-1R	273	314	87	12	87	0	1	1.058	0	1	1	0	10	2.0	1.5	surface and pitted scab, gc in pickouts
MSL211-3	256	327	79	9	72	7	12	1.064	0	1	0	0	10	4.0	1.5	gc and misshapen tubers in pickouts, tr surface scab
<b>Russet Norkotah</b>	<b>235</b>	<b>383</b>	<b>61</b>	<b>21</b>	<b>56</b>	<b>5</b>	<b>18</b>	<b>1.065</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>3.0</b>	<b>1.0</b>	<b>knobs in pickouts</b>
W6234-4RUS	230	386	60	30	53	7	10	1.076	0	1	0	0	10	3.0	2.0	tr surface and pitted scab, tr alligator hide
MSS544-1R	229	308	74	20	65	9	6	1.064	0	2	0	0	10	2.5	2.0	tr surface scab, misshapen pickouts, one tuber with severe VD
W2683-2RUS	124	304	41	20	34	7	39	1.075	1	0	1	0	10	2.0	4.5	gc and misshapen tubers in pickouts
<b>MEAN</b>	<b>367</b>	<b>452</b>	<b>81</b>					<b>1.071</b>								tr = trace, sl = slight, N/A = not applicable SED = stem end defect, gc = growth crack

<sup>1</sup> SIZE	<sup>2</sup> TUBER QUALITY (number of tubers per total cut)	<sup>3</sup> VINE VIGOR RATING	<sup>4</sup> VINE MATURITY RATING	Planted:	19-May-10
Bs: < 1 7/8" or < 4 oz.	HH: Hollow Heart	Date Taken: 22-Jun-10	Date Taken: 3-Aug-10	Vines Killed:	17-Sep-10
As: 1 7/8" - 3.25" or 4 - 10 oz.	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Days from Planting to Vine Kill:	121
OV: > 3.25" or > 10 oz.	IBS: Internal Brown Spot	1: Slow Emergence	1: Early (vines completely dead)	Seed Spacing :	Round white & red 9.5", Russet 11"
PO: Pickouts	BC: Brown Center	5: Early Emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)	No Fumigation	

<sup>5</sup>MAWN STATION: Hawks  
Planting to Vine Kill

**2010 Freshpack Potato Variety Trial**  
**Sandyland / Vogel, Newaygo County, MI**  
 Harvest 30-Sep-10 149 Days  
 DD, Base 40<sup>5</sup> 3334

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>3</sup>	VINE MATURITY <sup>4</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO		HH	VD	IBS	BC				
Russet Norkotah	452	537	84	9	52	32	7	1.065	0	4	0	0	10	3.0	2.0	alligator hide, uniform type
CO99053-3RUS	286	409	70	15	41	29	15	1.066	1	1	1	0	10	2.0	4.0	not uniform type
<b>MEAN</b>	<b>369</b>	<b>473</b>	<b>77</b>					<b>1.066</b>								

tr = trace, sl = slight, N/A = not applicable  
 SED = stem end defect, gc = growth crack

<u><sup>1</sup>SIZE</u>	<u><sup>2</sup>TUBER QUALITY (number of tubers per total cut)</u>	<u><sup>3</sup>VINE VIGOR RATING</u>	<u><sup>4</sup>VINE MATURITY RATING</u>	Planted:	4-May-10
Bs: < 1 7/8" or < 4 oz.	HH: Hollow Heart	Date Taken: 8-Jun-10	Date Taken: 25-Aug-10	Vines Killed:	30-Aug-10
As: 1 7/8" - 3.25" or 4 - 10 oz.	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Days from Planting to Vine Kill:	118
OV: > 3.25" or > 10 oz.	IBS: Internal Brown Spot	1: Slow Emergence	1: Early (vines completely dead)	Seed Spacing :	16"
PO: Pickouts	BC: Brown Center	5: Early emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)	Fall Fumigation	

<sup>5</sup>MAWN STATION: Fremont  
 Planting to Vine Kill

# 2010 Freshpack Potato Variety Trial

## TJJ Farms, Delta County, MI

Harvest 30-Sep-10 134 Days  
DD, Base 40<sup>5</sup> 3091

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>3</sup>	VINE MATURITY <sup>4</sup>	COMMENTS	
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	HH	VD	IBS					BC
<b>Reba</b>	<b>708</b>	<b>745</b>	<b>95</b>	<b>2</b>	<b>55</b>	<b>40</b>	<b>3</b>	<b>1.076</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>4.5</b>	<b>3.5</b>	
<b>Onaway</b>	<b>699</b>	<b>769</b>	<b>91</b>	<b>3</b>	<b>43</b>	<b>48</b>	<b>6</b>	<b>1.068</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>5.0</b>	<b>2.5</b>	<b>deep eyes</b>
<b>Silverton Russet</b>	<b>635</b>	<b>702</b>	<b>90</b>	<b>6</b>	<b>23</b>	<b>67</b>	<b>4</b>	<b>1.077</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>4.5</b>	<b>4.5</b>	
CO99256-2R	615	668	92	3	78	14	5	1.079	0	0	0	0	10	4.5	3.5	high percent of A's, nice tuber type
Colorado Rose	614	648	95	2	41	54	3	1.070	0	0	0	0	10	4.5	3.0	
Classic Russet	592	636	93	1	24	69	6	1.077	1	0	0	0	10	3.5	4.5	large percent of oversize
MSQ176-5	577	601	96	1	32	64	3	1.072	0	0	0	0	10	3.0	4.5	deep eyes
W5767-1R	575	629	91	4	68	23	5	1.072	0	0	0	0	10	5.0	3.0	
MSL211-3	498	527	95	4	76	19	1	1.071	0	0	0	0	10	5.0	4.0	
MSL268-D	496	605	82	4	71	11	14	1.083	0	0	0	0	10	4.5	4.5	high percent of pickouts
MSM182-1	477	506	95	2	92	3	3	1.077	0	0	0	1	10	4.5	3.0	high percent of A's, nice tuber type
W6234-4RUS	466	535	87	6	40	47	7	1.084	0	0	0	0	10	5.0	3.0	
W2609-1R	385	411	94	5	85	9	1	1.065	0	0	0	0	10	4.5	1.0	
CO99053-3RUS	384	472	82	7	42	40	11	1.081	1	0	0	0	10	4.5	4.5	
W2683-2RUS	362	529	68	13	46	22	19	1.083	2	0	0	0	10	4.5	3.0	
MSQ440-2	357	391	92	5	73	19	3	N/A	0	0	0	0	10	4.0	4.0	deep eyes
MSR217-1R	348	361	96	3	68	28	1	1.065	0	0	0	0	10	3.0	1.5	sunburn
W8946-1RUS	338	448	76	17	68	8	7	1.094	2	0	0	0	10	4.5	3.5	
CO00291-5R	333	393	84	4	80	4	12	1.070	0	0	0	0	10	3.5	5.0	skinning, tr commn scab
<b>Russet Norkotah</b>	<b>283</b>	<b>373</b>	<b>76</b>	<b>18</b>	<b>66</b>	<b>10</b>	<b>6</b>	<b>1.072</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>5.0</b>	<b>3.0</b>	

**MEAN 487 548 88 1.076**

tr = trace, sl = slight, N/A = not applicable  
SED = stem end defect, gc = growth crack

<sup>1</sup>SIZE  
Bs: < 1 7/8" or < 4 oz.  
As: 1 7/8" - 3.25" or 4 - 10 oz.  
OV: > 3.25" or > 10 oz.  
PO: Pickouts

<sup>2</sup>TUBER QUALITY (number of tubers per total cut)  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>3</sup>VINE VIGOR RATING  
Date Taken: 6-Jul-10  
Ratings: 1 - 5  
1: Slow Emergence  
5: Early Emergence (vigorous vine, some flowering)

<sup>4</sup>VINE MATURITY RATING  
Date Taken: 1-Sep-10  
Ratings: 1 - 5  
1: Early (vines completely dead)  
5: Late (vigorous vine, some flowering)

Planted: 19-May-10  
Vines Killed: 19-Sep-10  
Days from Planting to Vine Kill: 123  
Seed Spacing: 12.5"  
No Fumigation

<sup>5</sup>MAWN STATION: Escanaba  
Planting to Vine Kill

# 2010 Russet "Select" Freshpack Potato Variety Trial Overall Average - Three Locations

Elmable Farm, Kalkaska County, MI

MSU - Montcalm Research Farm, Montcalm County, MI

Walther Farms, Branch County, MI

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>3</sup>	VINE MATURITY <sup>4</sup>	2010 SCAB RATING <sup>5</sup>
	US#1	TOTAL	US#1	Bs	As	OV	PO		HH	VD	IBS	BC				
<b>Silverton Russet<sup>7</sup></b>	<b>377</b>	<b>456</b>	<b>83</b>	<b>12</b>	<b>66</b>	<b>17</b>	<b>5</b>	<b>1.067</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>6</b>	<b>70</b>	<b>2.2</b>	<b>2.6</b>	<b>1.0</b>
AF3362-1RUS <sup>9</sup>	342	458	75	15	60	15	10	1.063	0	5	9	6	10	2.0	1.5	NA
A98134-2RUS <sup>7</sup>	334	499	68	26	62	6	6	1.073	0	11	1	0	60	3.5	2.4	1.3
A01124-3RUS <sup>7</sup>	292	431	69	24	60	9	7	1.073	27	2	3	1	60	1.3	2.7	1.5
CO99053-3RUS <sup>6</sup>	276	349	80	16	69	11	4	1.076	4	9	0	0	50	2.0	3.7	2.0
W6234-4RUS <sup>7</sup>	273	385	71	21	59	12	8	1.078	5	6	0	0	60	2.5	1.9	3.5
AC00395-2RUS <sup>7</sup>	263	415	63	28	59	4	9	1.086	34	9	0	0	60	1.0	3.5	1.0
<b>GoldRush<sup>7</sup></b>	<b>249</b>	<b>406</b>	<b>62</b>	<b>23</b>	<b>57</b>	<b>5</b>	<b>15</b>	<b>1.067</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>1.3</b>	<b>1.6</b>	<b>1.0</b>
W2683-2RUS <sup>6</sup>	240	362	67	25	61	6	8	1.070	3	2	3	0	50	1.0	3.0	1.0
W8946-1RUS <sup>7</sup>	226	458	49	36	49	0	15	1.086	0	4	4	0	60	2.0	3.4	1.3
A0008-1TE <sup>9</sup>	209	348	60	18	48	12	22	1.063	6	0	0	0	10	1.0	2.0	NA
A98289-1RUS <sup>8</sup>	208	301	64	33	62	2	3	1.068	0	11	2	0	50	1.0	1.8	0.5
<b>Russet Norkotah<sup>7</sup></b>	<b>204</b>	<b>332</b>	<b>61</b>	<b>34</b>	<b>55</b>	<b>6</b>	<b>5</b>	<b>1.065</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>1.5</b>	<b>1.3</b>	<b>2.3</b>
<b>MEAN</b>	<b>269</b>	<b>400</b>	<b>67</b>					<b>1.072</b>								

NA= not available

<sup>1</sup> <u>SIZE</u> Bs: < 4 oz. As: 4 - 10 oz. OV: > 10 oz. PO: Pickouts	<sup>2</sup> <u>TUBER QUALITY (number of tubers per total cut)</u> HH: Hollow Heart VD: Vascular Discoloration IBS: Internal Brown Spot BC: Brown Center	<sup>3</sup> <u>VINE VIGOR RATING</u> Ratings: 1 - 5 1: Slow Emergence 5: Early Emergence (vigorous vine, some flowering)	<sup>4</sup> <u>VINE MATURITY RATING</u> Ratings: 1 - 5 1: Early (vines completely dead) 5: Late (vigorous vine, some flowering)	<sup>5</sup> <u>Common Scab Rating</u> 0: No Infection 1: Low Infection < 5% 3: Intermediate 5: Highly Susceptible
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<sup>6</sup>Grown at Elmable and MRF

<sup>7</sup>Grown at Elmable, MRF and Walther

<sup>8</sup>Grown at MRF and Walther

<sup>9</sup>Grown at Walther only

# 2010 Russet "Select" Freshpack Potato Variety Trial

## Elmable Farm, Kalkaska County, MI

Harvest 27-Sep-10                      146 Days

DD, Base 40<sup>5</sup>                      3350

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>3</sup>	VINE MATURITY <sup>4</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO		HH	VD	IBS	BC				
<b>Silverton Russet</b>	<b>458</b>	<b>517</b>	<b>88</b>	<b>10</b>	<b>69</b>	<b>19</b>	<b>2</b>	<b>1.066</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>2.5</b>	<b>3.0</b>	<b>clean white flesh</b>
A98134-2	408	515	79	21	72	7	0	1.078	0	2	0	0	10	3.5	2.0	tr surface scab, glassy end in one tuber, heavy russetting
<b>Silverton Russet*</b>	<b>407</b>	<b>463</b>	<b>88</b>	<b>11</b>	<b>70</b>	<b>18</b>	<b>1</b>	<b>1.064</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>2.0</b>	<b>2.5</b>	<b>nice overall type</b>
A01124-3	397	536	74	24	60	14	2	1.075	2	0	0	1	10	1.0	2.5	misshapen pickouts, heavy russetting
CO99053-3RUS	361	457	79	17	70	9	4	1.078	1	2	0	0	10	2.0	4.0	alligator hide
W8946-1RUS	327	531	62	35	62	0	3	1.083	0	0	3	0	10	2.0	3.5	heat sprouts, alligator hide
W6234-4RUS	293	403	73	23	68	5	4	1.078	1	1	0	0	10	2.5	1.5	tr surface scab, light russetting
AC00395-2RUS	277	434	64	36	60	4	0	1.091	6	2	0	0	10	1.0	4.5	heavy russetting
<b>GoldRush</b>	<b>259</b>	<b>418</b>	<b>62</b>	<b>18</b>	<b>60</b>	<b>2</b>	<b>20</b>	<b>1.066</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>1.0</b>	<b>1.5</b>	<b>many misshapen tubers</b>
<b>GoldRush*</b>	<b>244</b>	<b>351</b>	<b>69</b>	<b>20</b>	<b>63</b>	<b>6</b>	<b>11</b>	<b>1.069</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>1.5</b>	<b>1.5</b>	<b>misshapen pickouts, heavy russetting</b>
<b>Russet Norkotah</b>	<b>238</b>	<b>397</b>	<b>60</b>	<b>36</b>	<b>54</b>	<b>6</b>	<b>4</b>	<b>1.064</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>2.0</b>	<b>1.0</b>	<b>misshapen pickouts, alligator hide</b>
W2683-2RUS	227	394	57	31	56	1	12	1.069	0	1	2	0	10	1.0	3.0	severe pythium leak, tr heat necrosis
<b>MEAN</b>	<b>325</b>	<b>451</b>	<b>71</b>					<b>1.074</b>								

tr = trace, sl = slight, N/A = not applicable  
 SED = stem end defect, gc = growth crack

<sup>1</sup> SIZE	<sup>2</sup> TUBER QUALITY (number of tubers per total cut)	<sup>3</sup> VINE VIGOR RATING	<sup>4</sup> VINE MATURITY RATING	Planted:	4-May-10
Bs: < 1 7/8" or < 4 oz.	HH: Hollow Heart	Date Taken: 8-Jun-10	Date Taken: 23-Aug-10	Vines Killed:	12-Sep-10
As: 1 7/8" - 3.25" or 4 - 10 oz.	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1-5	Days from Planting to Vine Kill:	131
OV: > 3.25" or > 10 oz.	IBS: Internal Brown Spot	1: Slow Emergence	1: Early (vines completely dead)	Seed Spacing :	12"
PO: Pickouts	BC: Brown Center	5: Early emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)	Fall Fumigation	
					<sup>5</sup> MAWN STATION: Arlene Planting to Vine Kill

\* = second replication of previously listed varieties

# 2010 Russet "Select" Freshpack Potato Variety Trial

## Walther Farms, Branch County, MI

Harvest 6-Oct-10 142 Days

DD, Base 40<sup>5</sup> 4109

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	TUBER QUALITY <sup>2</sup>				TOTAL CUT	VINE VIGOR <sup>3</sup>	VINE MATURITY <sup>4</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO		HH	VD	IBS	BC				
AF3362-1RUS	342	458	75	15	60	15	10	1.063	0	5	9	6	10	2.0	1.5	alligator hide, gc and knobs in pickouts, bad heat related internal defects
A98289-1RUS	332	431	77	17	73	4	6	1.070	0	3	0	0	10	1.0	1.5	gc and misshapen in pickouts, severe blackleg rot in plot
<b>Silverton Russet</b>	<b>307</b>	<b>458</b>	<b>67</b>	<b>20</b>	<b>59</b>	<b>8</b>	<b>13</b>	<b>1.066</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>2.0</b>	<b>2.0</b>	
A98134-2RUS	291	570	51	33	49	2	16	1.071	0	3	1	0	10	2.5	2.5	misshapen in pickouts, tr gc, alligator hide, type not uniform
<b>Russet Norkotah</b>	<b>278</b>	<b>416</b>	<b>67</b>	<b>22</b>	<b>54</b>	<b>13</b>	<b>11</b>	<b>1.068</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>1.0</b>	<b>1.5</b>	<b>misshapen and knobs in pickouts</b>
<b>GoldRush</b>	<b>278</b>	<b>533</b>	<b>52</b>	<b>25</b>	<b>47</b>	<b>5</b>	<b>23</b>	<b>1.068</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>1.5</b>	<b>2.0</b>	
A01124-3RUS	248	467	53	37	52	1	10	1.069	1	0	2	0	10	1.5	2.5	knobs and heat sprouts in pickouts
W6234-4RUS	226	362	63	24	48	15	13	1.076	1	3	0	0	10	1.5	2.5	misshapen pickouts, heat sprouts, heat necrosis in two tubers
AC00395-2RUS	223	403	55	21	52	3	24	1.077	4	1	0	0	10	1.0	3.5	knobs and heat sprouts in pickouts
A0008-1TE	209	348	60	18	48	12	22	1.063	6	0	0	0	10	1.0	2.0	many gc and misshapen in pickouts, alligator hide
W8946-1RUS	124	451	28	35	28	0	37	1.084	0	1	0	0	10	2.0	3.0	sl surface scab, severe heat sprouts in pickouts

**MEAN 260 445 59 1.071**

tr = trace, sl = slight, N/A = not applicable  
SED = stem end defect, gc = growth crack

<u><sup>1</sup>SIZE</u>	<u><sup>2</sup>TUBER QUALITY (number of tubers per total cut)</u>	<u><sup>3</sup>VINE VIGOR RATING</u>	<u><sup>4</sup>VINE MATURITY RATING</u>	Planted:	17-May-10
Bs: < 1 7/8" or < 4 oz.	HH: Hollow Heart	Date Taken: 14-Jun-10	Date Taken: 3-Sep-10	Vines Killed:	25-Sep-10
As: 1 7/8" - 3.25" or 4 - 10 oz.	VD: Vascular Discoloration	Ratings: 1 - 5	Ratings: 1 - 5	Days from Planting to Vine Kill:	131
OV: > 3.25" or > 10 oz.	IBS: Internal Brown Spot	1: Slow Emergence	1: Early (vines completely dead)	Seed Spacing :	11"
PO: Pickouts	BC: Brown Center	5: Early Emergence (vigorous vine, some flowering)	5: Late (vigorous vine, some flowering)	No Fumigation	
					<sup>5</sup> MAWN STATION: Constantine Planting to Vine Kill

## Variety Release

We released MSJ461-1 as Missaukee (late blight, golden nematode and verticillium wilt resistant round white) in 2010. We are continuing to promote the seed production and testing of Beacon Chipper, a 2005 release. In addition, we are also continuing to promote Michigan Purple, Jacqueline Lee for the tablestock specialty markets. Boulder is being commercially grown in Quebec and they now have interest in Kalkaska based upon 2 years of trials. Lastly, commercial seed of MSH228-6 and MSJ126-9Y are being produced and we will continue to seek commercial testing of these lines. MSL292-A (long-term chipper), MSR061-1 (scab, PVY and late blight resistant chipper), MSL007-B (scab resistant chipper), MSQ086-3 (late blight resistant chipper) and MSQ070-1 (scab and late blight resistant chipper) are being fast-tracked for the chip-processing market. We also have a focused ribavirin-based virus eradication system to generate virus-free tissue culture lines for the industry. About 30 lines are in ribavirin treatment at this time to remove PVS and PVY. This year, about 80 new MSU breeding lines are being put into tissue culture.

## MSU Variety Releases:

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### MSJ147-1

**Parentage:** NorValley X S440

**Developers:** Michigan State University and the Michigan Agricultural Experiment Station

**Plant Variety Protection:** Will be considered.

**Strengths:** MSJ147-1 is a round white chip-processing potato that has a bright skin, white flesh and round shape. In addition, it has been determined to store at temperatures below 50°F and maintain low reducing sugar levels into May or June.



**Weaknesses:** Small vine, slow to emerge.

**Incentives for production:** MSJ147-1 produces many A-size tubers that are low in defects, however we are seeing some HH in the large tubers this storage season. Potatoes maintain low reducing sugar content for chip-processing out of the field and from storage.

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### MSJ126-9Y

**Parentage:** Penta x OP

**Developers:** Michigan State University and the Michigan Agricultural Experiment Station

**Plant Variety Protection:** To Be Applied For.

**Strengths:** MSJ126-9Y is a chip-processing potato with an attractive round appearance with shallow eyes. MSJ126-9Y has a medium vine and an early to mid-season maturity. This variety has resistance to *Streptomyces scabies* (common scab) stronger than Pike. MSJ126-9Y also has excellent chip-processing long-term storage characteristics and better tolerance to blackspot bruise than Snowden.



**Incentives for production:** Excellent chip-processing quality with long-term storage characteristics, common scab resistance superior to Pike, and good tuber type.

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### MSH228-6

**Parentage:** MSC127-3 x OP

**Developers:** Michigan State University and the Michigan Agricultural Experiment Station

**Plant Variety Protection:** Will be considered.

**Strengths:** MSH228-6 is a chip-processing potato with moderate resistance to *Streptomyces scabies* (common scab). MSH228-6 also has a promising storage sugar profile and good chip-processing long-term storage characteristics.



**Incentives for production:** Chip-processing quality with long-term storage characteristics, and moderate common scab resistance with good tuber type.

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### MSL292-A

**Parentage:** Snowden x MSH098-2

**Developers:** Michigan State University and the Michigan Agricultural Experiment Station

**Plant Variety Protection:** Will be considered.

**Strengths:** MSL292-A is a chip-processing potato with an attractive round appearance with shallow eyes. MSL292-A has a full-sized vine



and an early to mid-season maturity. MSL292-A has above average yield potential and specific gravity similar to Snowden. This variety has excellent chip-processing long-term storage characteristics and a similar to better tolerance to blackspot bruise than Snowden.

**Incentives for production:** Excellent chip-processing quality with long-term storage characteristics, above average yield, specific gravity similar to Snowden, and good tuber type.

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### MSL007-B

**Parentage:** MSA105-1 x MSG227-2

**Developers:** Michigan State University and the Michigan Agricultural Experiment Station

**Plant Variety Protection:** Will be considered.

**Strengths:** MSL007-B is a chip-processing potato with an attractive, uniform round appearance with shallow eyes. This variety has resistance to *Streptomyces scabies* (common scab) stronger than Pike, with a strong, netted skin. MSL007-B was the most highly merit rated line in the National Chip Processing Trial across eight locations.



**Incentives for production:** Chip-processing quality with common scab resistance superior to Pike, and a uniform, round tuber type.

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### MSR061-1

**Parentage:** MegaChip x NY121

**Developers:** Michigan State University and the Michigan Agricultural Experiment Station

**Plant Variety Protection:** Will be considered.

**Strengths:** MSR061-1 is a chip-processing potato with resistance to common scab (*Streptomyces scabies*) and moderate foliar late blight (*Phytophthora infestans*) resistance. This variety has medium yield similar to Pike and a 1.079 (average) specific gravity and an attractive, uniform, round appearance. MSR061-1 has a medium vine and an early to mid-season maturity.



**Incentives for production:** Chip-processing quality with common scab resistance similar to Pike, moderate foliar late blight resistance (US8 genotype), and uniform, round tuber type.

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## MSQ176-5

**Parentage:** MSI152-A x Missaukee (MSJ461-1)

**Developers:** Michigan State University and the Michigan Agricultural Experiment Station

**Plant Variety Protection:** Will be considered.

**Strengths:** MSQ176-5 is a high-yielding freshmarket potato with bright skin and a uniform smooth, round appearance with an attractive tuber type. This variety has a strong vine and a mid-season maturity. MSQ176-5 has strong foliar resistance to the US8 genotype of late blight. MSQ176-5 also has resistance to *Streptomyces scabies* (common scab) similar to Pike.



**Incentives for production:** Excellent freshmarket tuber quality and type with foliar late blight resistance and common scab resistance.

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**Table 1**

**EARLY HARVEST TRIAL  
 MONTCALM RESEARCH FARM  
 May 4 to August 9, 2010 (97 days)**

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>						SP GR	CHIP SCORE <sup>2</sup>	PERCENT (%)				MAT <sup>4</sup>	3-YR AVG
	US#1	TOTAL	US#1	Bs	As	OV	PO	TUBER QUALITY <sup>3</sup>				US#1				
								HH			VD	IBS	BC	CWT/A		
<b>Onaway</b>	<b>369</b>	<b>433</b>	<b>85</b>	<b>12</b>	<b>81</b>	<b>4</b>	<b>3</b>	<b>1.062</b>	-	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>2.2</b>	<b>342*</b>	
MSL211-3	338	387	87	11	81	6	1	1.066	-	0	0	0	0	3.0	295*	
MI Purple Sport III	325	364	89	10	80	9	0	1.068	-	5	5	0	0	3.0	-	
MI Purple	321	354	91	9	84	7	1	1.070	-	5	3	3	0	3.0	-	
<b>Snowden</b>	<b>315</b>	<b>367</b>	<b>86</b>	<b>14</b>	<b>83</b>	<b>3</b>	<b>0</b>	<b>1.081</b>	<b>1.0</b>	<b>3</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>3.5</b>	-	
<b>Atlantic</b>	<b>302</b>	<b>361</b>	<b>84</b>	<b>16</b>	<b>81</b>	<b>3</b>	<b>0</b>	<b>1.085</b>	<b>1.0</b>	<b>18</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>3.5</b>	<b>257</b>	
MSM037-3	293	340	86	13	84	2	1	1.065	1.0	0	0	0	0	3.0	259*	
MSM171-A	287	315	91	8	75	16	1	1.055	-	8	5	0	0	2.9	288	
MSQ425-4Y	221	326	68	32	68	0	0	1.065	1.0	3	0	0	0	2.7	-	
<b>Pike</b>	<b>203</b>	<b>266</b>	<b>76</b>	<b>23</b>	<b>75</b>	<b>1</b>	<b>1</b>	<b>1.075</b>	<b>1.0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3.8</b>	<b>207</b>	
MSQ086-3	160	283	56	44	56	0	0	1.066	1.0	0	0	0	0	4.3	219*	
MSN215-2P	154	236	65	32	64	1	3	1.069	-	0	0	0	0	2.9	-	
MEAN	274	336						1.069								
HSD <sub>0.05</sub>	101	102	11					0.006							* Two-Year Average	

<sup>1</sup>SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.

<sup>2</sup>CHIP SCORE: Snack Food Association Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.

<sup>3</sup>QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.

<sup>4</sup>MATURITY RATING: August 3, 2010; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

Table 2

ADVANCED TRIAL  
MONTCALM RESEARCH FARM  
May 4 to September 21, 2010 (140 days)

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>						CHIP SCORE <sup>2</sup>	PERCENT (%) TUBER QUALITY <sup>3</sup>					MAT <sup>5</sup>	BRUISE <sup>6</sup>	3-YR AVG
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR		HH	VD	IBS	BC	SCAB <sup>4</sup>			US#1
																	CWT/A
<b>Snowden</b>	<b>439</b>	<b>490</b>	<b>90</b>	<b>10</b>	<b>80</b>	<b>10</b>	<b>1</b>	<b>1.079</b>	<b>1.0</b>	<b>8</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>2.9</b>	<b>2.1</b>	<b>1.5</b>	<b>322</b>
MSL292-A	403	468	86	14	83	3	0	1.079	1.0	3	0	0	0	2.5	1.2	1.3	276*
Kalkaska (MSJ036-A)	400	504	79	21	78	1	0	1.081	1.0	3	8	8	0	1.5	3.3	1.2	371
MSH228-6	383	427	90	9	84	5	2	1.073	1.0	8	25	0	0	1.0	2.4	0.4	287
MSQ279-1	373	411	91	9	77	14	1	1.072	1.0	3	0	0	0	1.3	3.6	0.2	282*
MSQ086-3	372	514	72	27	72	0	0	1.074	1.0	0	5	0	0	2.3	2.9	0.4	-
<b>Atlantic</b>	<b>356</b>	<b>410</b>	<b>87</b>	<b>13</b>	<b>81</b>	<b>6</b>	<b>0</b>	<b>1.085</b>	<b>1.0</b>	<b>20</b>	<b>8</b>	<b>8</b>	<b>0</b>	<b>2.9</b>	<b>1.9</b>	<b>2.2</b>	<b>-</b>
MSP515-2	349	418	84	16	71	12	0	1.077	1.0	5	10	13	0	2.3	3.0	1.4	333*
Beacon Chipper	349	370	94	5	71	24	1	1.075	1.0	5	35	0	0	2.0	2.8	1.3	347
<b>FL1879</b>	<b>339</b>	<b>373</b>	<b>91</b>	<b>8</b>	<b>77</b>	<b>14</b>	<b>1</b>	<b>1.072</b>	<b>1.0</b>	<b>33</b>	<b>13</b>	<b>5</b>	<b>0</b>	<b>3.5</b>	<b>2.0</b>	<b>0.7</b>	<b>347</b>
MSQ070-1	338	422	80	20	79	1	0	1.088	1.0	3	8	8	0	1.3	3.6	1.0	304
MSQ440-2	314	353	89	11	82	6	0	1.055	1.0	0	38	0	0	1.8	2.0	0.2	-
MSL007-B	310	382	81	19	79	2	0	1.074	1.0	3	10	0	0	1.0	2.7	0.8	214*
MSJ126-9Y	259	306	85	15	82	3	0	1.070	1.0	0	20	0	0	1.0	2.1	0.6	240
MSR061-1	259	339	76	23	75	1	0	1.077	1.0	8	5	0	0	1.3	2.0	0.6	244
MSP270-1	240	318	75	25	75	1	0	1.070	1.0	0	3	0	0	1.0	3.0	0.2	-
MSP459-5	217	344	63	37	62	1	0	1.070	1.0	0	3	0	0	3.0	2.5	1.6	208
MSJ147-1	158	265	59	33	59	0	8	1.083	1.0	0	0	0	0	1.3	2.9	0.6	197
MEAN	325	395						1.075						1.9	2.5	0.9	
HSD <sub>0.05</sub>	149	153						0.007						2.3	1.4		* Two-Year Average

<sup>1</sup>LBR Line(s) demonstrated foliar resistance to Late Blight (*Phytophthora infestans*) in inoculated field trials at the MSU Muck Soils Research Farm.

<sup>1</sup>SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.

<sup>2</sup>CHIP SCORE: Snack Food Association Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.

<sup>3</sup>QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.

<sup>4</sup>SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.

<sup>5</sup>MATURITY RATING: August 24, 2010; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

<sup>6</sup>BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Table 3

MICHIGAN STATE UNIVERSITY  
POTATO BREEDING and GENETICSNORTH CENTRAL REGIONAL TRIAL  
MONTCALM RESEARCH FARM  
May 4 to September 7, 2010 (126 days)

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>						CHIP SCORE <sup>2</sup>	PERCENT (%) TUBER QUALITY <sup>3</sup>					MAT <sup>5</sup>	BRUISE <sup>6</sup>	3-YR AVG
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR		HH	VD	IBS	BC	SCAB <sup>4</sup>			US#1
																	CWT/A
MSL211-3	406	458	89	10	81	8	2	1.068	2.5	0	3	0	0	2.2	1.3	1.0	-
ND8555-8R	391	509	77	23	75	2	0	1.067	1.5	3	0	3	0	2.0	1.0	1.1	-
<b>Snowden</b>	<b>382</b>	<b>433</b>	<b>88</b>	<b>11</b>	<b>82</b>	<b>7</b>	<b>1</b>	<b>1.081</b>	<b>1.0</b>	<b>18</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>2.9</b>	<b>1.6</b>	<b>1.4</b>	<b>330</b>
<b>Atlantic</b>	<b>375</b>	<b>420</b>	<b>89</b>	<b>9</b>	<b>75</b>	<b>14</b>	<b>2</b>	<b>1.086</b>	<b>1.5</b>	<b>53</b>	<b>13</b>	<b>13</b>	<b>0</b>	<b>2.9</b>	<b>1.8</b>	<b>1.4</b>	<b>332</b>
W5015-12	372	451	83	17	77	6	1	1.085	1.0	28	0	10	0	3.0	2.3	2.4	316*
MSQ176-5	367	411	89	10	66	23	1	1.066	1.0	23	3	5	0	3.0	2.0	0.6	292*
<b>Red Pontiac</b>	<b>365</b>	<b>421</b>	<b>87</b>	<b>10</b>	<b>72</b>	<b>15</b>	<b>3</b>	<b>1.061</b>	<b>3.5</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4.5</b>	<b>2.1</b>	<b>0.7</b>	-
<b>NorValley</b>	<b>352</b>	<b>416</b>	<b>85</b>	<b>15</b>	<b>77</b>	<b>8</b>	<b>0</b>	<b>1.072</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2.3</b>	<b>1.4</b>	<b>1.2</b>	-
MSL268-D	343	419	82	16	81	1	2	1.081	1.0	0	10	0	0	3.0	1.8	1.5	307
MSM182-1	321	382	84	15	78	6	1	1.068	2.5	5	3	13	0	3.0	2.0	1.2	-
ND8307C-3	289	370	78	21	77	1	1	1.087	1.0 !	5	3	0	0	1.5	1.6	0.8	-
ND8229-3RUS	274	331	83	16	75	8	1	1.076	1.0	3	0	0	0	1.0	2.3	2.0	-
W2609-1R	270	328	82	17	79	3	1	1.058	2.5	0	0	3	0	1.0	1.3	0.4	-
<b>Red Norland</b>	<b>251</b>	<b>287</b>	<b>87</b>	<b>13</b>	<b>84</b>	<b>4</b>	<b>0</b>	<b>1.055</b>	<b>2.0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2.0</b>	<b>1.5</b>	<b>0.2</b>	<b>260*</b>
W2978-3	248	322	77	23	74	3	0	1.072	1.0	0	0	0	0	3.5	1.1	0.5	244*
W2717-5	232	282	82	16	82	0	1	1.088	1.5	5	10	3	3	3.0	1.1	1.2	-
W2310-3	227	295	77	21	76	1	2	1.086	1.0	5	0	0	0	2.0	2.1	1.9	-
ND8314-1R	201	365	55	44	53	2	1	1.063	3.0	5	5	0	0	3.0	1.0	1.0	-
MEAN	315	383						1.073						2.5	1.6	1.1	
HSD <sub>0.05</sub>	155	158						0.006						2.3	0.8		* Two-Year Average

<sup>1</sup>LBR Line(s) demonstrated foliar resistance to Late Blight (*Phytophthora infestans*) in inoculated field trials at the MSU Muck Soils Research Farm.

All the lines in the Round White Trial in 2008 were North Central Regional Trial entries.

<sup>1</sup>SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.

<sup>2</sup>CHIP SCORE: Snack Food Association Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.

<sup>3</sup>QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.

<sup>4</sup>SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.

<sup>5</sup>MATURITY RATING: August 24, 2010; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

<sup>6</sup>BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Table 4

**RUSSET TRIAL**  
**MONTCALM RESEARCH FARM**  
May 4 to September 9, 2010 (128 days)

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>						PERCENT (%) TUBER QUALITY <sup>2</sup>						3-YR AVG	
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	HH	VD	IBS	BC	SCAB <sup>3</sup>	MAT <sup>4</sup>	BRUISE <sup>5</sup>	US#1
																CWT/A
<b>Silverton Russet</b>	<b>337</b>	<b>385</b>	<b>88</b>	<b>10</b>	<b>65</b>	<b>23</b>	<b>2</b>	<b>1.070</b>	<b>3</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>2.9</b>	<b>0.3</b>	<b>322</b>
A98134-2RUS	302	411	74	24	65	8	3	1.071	0	15	0	0	1.3	2.6	0.4	-
W6234-4RUS	300	390	77	17	62	15	6	1.079	8	5	0	0	3.5	1.8	0.4	-
AC00395-2RUS	289	408	71	26	65	6	3	1.091	60	15	0	0	1.0	2.6	0.6	-
MSN170-A**	278	331	84	13	79	5	3	1.078	5	0	0	0	1.8	1.7	0.5	289
W2683-2RUS	252	330	76	20	65	11	4	1.071	8	3	3	0	1.0	2.9	2.6	-
A01124-3RUS	231	291	79	13	67	12	8	1.075	60	5	3	0	1.5	3.1	0.0	-
W8946-1RUS	228	391	58	36	57	1	5	1.091	0	8	3	0	1.3	3.8	1.5	-
<b>Goldrush</b>	<b>215</b>	<b>323</b>	<b>67</b>	<b>27</b>	<b>58</b>	<b>8</b>	<b>6</b>	<b>1.065</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>1.5</b>	<b>0.6</b>	<b>235*</b>
CO99053-3RUS	191	241	79	18	67	12	3	1.074	8	18	0	0	2.0	3.3	0.4	271
<b>Russet Norkotah</b>	<b>156</b>	<b>252</b>	<b>62</b>	<b>37</b>	<b>60</b>	<b>2</b>	<b>1</b>	<b>1.064</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>2.3</b>	<b>1.4</b>	<b>0.1</b>	<b>155</b>
<b>Russet Burbank</b>	<b>124</b>	<b>293</b>	<b>42</b>	<b>25</b>	<b>39</b>	<b>3</b>	<b>33</b>	<b>1.073</b>	<b>5</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>2.0</b>	<b>2.0</b>	<b>0.8</b>	<b>-</b>
A98289-1RUS	84	170	50	50	50	0	0	1.066	0	20	5	0	0.5	2.0	0.6	-
MEAN	230	324						1.074					1.5	2.4	0.7	
HSD <sub>0.05</sub>	147	139						0.005					2.3	1.3	* Two-Year Average	

\*\*Not Russet lines

<sup>LBR</sup> Line(s) demonstrated foliar resistance to Late Blight (*Phytophthora infestans*) in inoculated field trials at the MSU Muck Soils Research Farm.

<sup>1</sup>SIZE: B: < 4 oz.; A: 4-10 oz.; OV: > 10 oz.; PO: Pickouts.

<sup>2</sup>QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.

<sup>3</sup>SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.

<sup>4</sup>MATURITY RATING: August 24, 2010; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

<sup>5</sup>BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Table 5

ADAPTATION TRIAL, CHIP-PROCESSING LINES  
MONTCALM RESEARCH FARM  
May 4 to September 20, 2010 (139 days)

LINE	PERCENT (%)															
	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>2</sup>	TUBER QUALITY <sup>3</sup>				SCAB <sup>4</sup>	MAT <sup>5</sup>	BRUISE <sup>6</sup>
	US#1	TOTAL	US#1	Bs	As	OV	PO			HH	VD	IBS	BC			
MSQ035-3	514	561	92	8	84	8	0	1.075	1.0	0	5	0	0	1.0	2.3	2.2
MSS206-2	504	531	95	4	76	19	1	1.065	1.5	0	15	0	0	2.5	2.3	0.9
Missaukee	491	576	85	14	79	6	0	1.075	1.0	0	3	5	0	2.5	2.4	1.5
<b>Snowden</b>	<b>476</b>	<b>528</b>	<b>90</b>	<b>10</b>	<b>83</b>	<b>7</b>	<b>0</b>	<b>1.080</b>	<b>1.0</b>	<b>10</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>2.9</b>	<b>2.6</b>	<b>1.6</b>
MSQ432-2PP	407	468	87	9	77	10	4	1.070	2.0	3	0	0	0	2.0	2.5	0.4
<b>Atlantic</b>	<b>378</b>	<b>434</b>	<b>87</b>	<b>12</b>	<b>81</b>	<b>6</b>	<b>1</b>	<b>1.086</b>	<b>1.0</b>	<b>25</b>	<b>3</b>	<b>8</b>	<b>0</b>	<b>2.9</b>	<b>1.9</b>	<b>1.9</b>
MSR036-5	365	428	85	9	64	21	6	1.078	1.5	25	10	0	0	1.0	2.5	1.2
MSR058-1	360	486	74	20	70	4	6	1.076	1.0	8	20	0	0	1.5	2.5	1.5
MSR169-8Y	359	450	80	20	77	3	0	1.081	1.0!	3	5	0	0	1.0	2.6	1.0
MSK409-1	333	395	84	14	78	6	2	1.084	1.0	13	18	3	0	1.3	2.0	2.6
MSS026-2Y	286	343	83	17	76	7	0	1.080	1.0	5	8	0	0	3.0	2.8	1.5
MSS108-1	276	354	78	22	75	3	1	1.072	2.0	0	10	0	0	1.5	2.5	0.3
MSR159-02	269	330	82	14	67	14	4	1.080	1.0	40	5	5	0	2.0	2.9	0.6
CO95051-7W	262	338	77	22	76	1	0	1.079	1.0	0	13	0	0	1.5	2.9	2.0
MSR131-2	256	383	67	33	66	1	0	1.072	1.0	0	15	5	0	1.0	3.1	1.0
MSN148-A	249	350	71	28	69	2	1	1.083	1.0	3	3	0	0	1.5	2.8	1.9
<b>Pike</b>	<b>243</b>	<b>298</b>	<b>82</b>	<b>17</b>	<b>78</b>	<b>4</b>	<b>1</b>	<b>1.078</b>	<b>1.0</b>	<b>3</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>1.1</b>	<b>2.1</b>	<b>0.8</b>
MSQ558-2RR	230	380	60	39	60	1	1	1.066	1.0	0	0	0	0	2.3	1.3	1.8
MSR102-3	207	256	81	12	69	12	7	1.078	1.0	8	10	0	0	1.0	3.4	0.5
MSS258-1	187	225	83	17	78	5	0	1.059	1.0	0	0	0	0	2.0	1.3	0.8
MSR226-1RR	169	294	57	39	55	2	4	1.060	1.0!	0	0	0	0	3.0	1.6	0.6
MEAN	325	400						1.075						1.8	2.4	1.3
HSD <sub>0.05</sub>	193	199						0.009						2.3	1.0	

<sup>LBR</sup> Line(s) demonstrated foliar resistance to Late Blight (*Phytophthora infestans*) in inoculated field trials at the MSU Muck Soils Research Farm.

<sup>1</sup>SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.

<sup>2</sup>CHIP SCORE: Snack Food Association Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.

<sup>3</sup>QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.

<sup>4</sup>SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.

<sup>5</sup>MATURITY RATING: August 24, 2010; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

<sup>6</sup>BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Table 6

ADAPTATION TRIAL, TABLESTOCK LINES  
MONTCALM RESEARCH FARM  
May 4 to September 7, 2010 (126 days)

LINE	PERCENT (%)														
	CWT/A		PERCENT OF TOTAL <sup>1</sup>					TUBER QUALITY <sup>2</sup>							
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	HH	VD	IBS	BC	SCAB <sup>3</sup>	MAT <sup>4</sup>	BRUISE <sup>5</sup>
MSS582-1SPL	510	541	94	5	78	17	1	1.074	0	3	0	0	2.0	2.3	0.5
Reba	469	494	95	5	81	14	0	1.072	18	23	0	0	2.5	2.8	1.4
MSQ461-2PP	412	465	89	10	85	3	1	1.079	0	0	0	0	2.0	1.9	0.4
MSQ341-BY	399	458	87	13	84	3	0	1.078	0	18	0	0	1.5	2.5	0.5
<b>Onaway</b>	<b>379</b>	<b>432</b>	<b>88</b>	<b>11</b>	<b>82</b>	<b>6</b>	<b>1</b>	<b>1.060</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>2.1</b>	<b>1.7</b>	<b>1.1</b>
MSN230-1RY	364	447	82	17	81	1	1	1.087	3	13	0	0	2.0	2.6	1.9
MSM288-2Y	358	483	74	25	74	0	0	1.071	3	13	0	0	3.0	1.5	0.1
MSS576-05SPL	347	422	82	18	81	1	0	1.071	0	3	0	0	2.0	1.9	0.4
MSL228-1SPL	318	361	88	10	82	6	2	1.077	3	10	0	0	1.8	1.8	0.5
MSQ134-5	302	413	73	26	72	1	1	1.074	0	5	0	0	2.5	3.0	0.6
MSR157-1Y	266	307	87	13	83	4	1	1.075	0	10	0	0	1.3	2.4	0.3
MSQ425-4Y	259	359	72	28	72	0	0	1.067	0	15	0	0	2.5	1.9	1.5
MSS514-1PP	251	340	74	23	74	0	3	1.061	0	0	0	0	2.0	2.0	0.5
MSN215-2P	240	338	71	22	71	0	7	1.072	0	10	0	0	1.0	1.6	0.6
Jacqueline Lee	155	309	50	37	50	0	12	1.079	0	8	0	0	3.3	2.6	0.9
MSS544-1R	140	219	64	36	64	0	0	1.059	0	3	0	0	1.0	1.6	0.1
MEAN	323	399						1.072					2.0	2.1	0.7
HSD <sub>0.05</sub>	134	149						0.006					2.3	1.0	

<sup>LBR</sup> Line(s) demonstrated foliar resistance to Late Blight (*Phytophthora infestans*) in inoculated field trials at the MSU Muck Soils Research Farm.

<sup>NCR</sup> North Central Regional Entry

<sup>1</sup>SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.

<sup>2</sup>QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.

<sup>3</sup>SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.

<sup>4</sup>MATURITY RATING: August 24, 2010; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

<sup>5</sup>BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Table 7

**PRELIMINARY TRIAL, CHIP-PROCESSING LINES**  
**MONTCALM RESEARCH FARM**  
**May 4 to September 15, 2010 (134 days)**

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>2</sup>	PERCENT (%)						
	US#1	TOTAL	US#1	Bs	As	OV	PO			TUBER QUALITY <sup>3</sup>						
										HH	VD	IBS	BC	SCAB <sup>4</sup>	MAT <sup>5</sup>	BRUISE <sup>6</sup>
MSU379-1	547	604	91	8	80	11	1	1.071	1.0	0	0	0	0	1.5	2.8	0.2
MSR148-4	534	638	84	16	84	0	0	1.073	1.0	0	20	10	0	2.5	2.0	1.0
MSR127-2	486	575	84	16	84	0	0	1.091	1.0	0	0	0	0	1.0	3.8	2.3
MSU383-1	446	488	91	7	78	13	1	1.088	1.0	10	5	0	0	1.0	1.5	1.4
MST220-8	434	522	83	15	78	6	1	1.071	1.5	20	0	0	0	1.5	3.3	0.8
<b>Snowden</b>	<b>423</b>	<b>478</b>	<b>88</b>	<b>10</b>	<b>76</b>	<b>12</b>	<b>1</b>	<b>1.079</b>	<b>1.0</b>	<b>25</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>3.0</b>	<b>2.8</b>	<b>1.2</b>
CO02033-1W	422	512	82	12	78	4	5	1.089	1.0	20	25	10	0	3.5	2.8	1.1
<b>Atlantic</b>	<b>417</b>	<b>483</b>	<b>86</b>	<b>11</b>	<b>75</b>	<b>11</b>	<b>2</b>	<b>1.090</b>	<b>1.0</b>	<b>45</b>	<b>5</b>	<b>55</b>	<b>0</b>	<b>3.0</b>	<b>2.3</b>	<b>1.5</b>
NY139	416	466	89	10	86	3	1	1.085	1.0	0	20	0	0	2.0	3.0	0.9
AF2291-10	403	455	89	11	83	5	1	1.086	1.0	10	25	5	0	2.0	2.5	1.4
MSU384-1	393	444	88	10	84	4	1	1.083	1.0	0	10	10	0	1.0	2.8	0.2
MSQ130-4	379	452	84	16	76	7	0	1.074	1.5	25	0	10	0	2.0	2.3	0.4
CO02024-9W	377	492	77	22	75	1	1	1.078	1.0	0	0	0	0	3.0	3.0	0.7
MSU389-1	370	425	87	11	84	3	2	1.074	-	0	0	0	0	-	1.8	-
MST191-2Y	367	471	78	21	75	3	1	1.084	1.0!	0	0	0	0	3.0	2.8	1.5
MSNDU030-1	364	437	83	16	77	7	1	1.080	1.0	10	5	0	0	1.5	2.3	1.0
CO02321-4W	363	425	85	14	76	10	1	1.082	1.0	10	0	10	0	3.0	2.0	1.3
CO00197-3W	361	482	75	21	75	0	4	1.080	1.0	0	15	0	0	3.5	1.8	0.7
MSU088-1	356	421	85	15	83	2	0	1.084	1.0	0	0	0	0	3.0	2.8	1.2
MST306-1	351	481	73	26	73	0	1	1.078	1.5	0	0	5	0	1.5	2.0	0.4
MSU245-1	325	416	78	20	78	0	2	1.088	1.0	45	0	0	0	-	2.3	0.6
MST424-3	308	345	89	9	84	5	2	1.069	1.0	0	15	0	0	1.5	2.0	1.1
MST437-1	304	364	84	13	72	11	3	1.084	1.0	10	5	0	0	2.5	2.5	0.4
MSU246-1	301	381	79	21	77	2	0	1.088	1.0	5	20	5	0	-	2.5	1.6
CO00188-4W	294	395	75	25	73	2	1	1.074	1.0	0	10	0	0	1.5	1.3	0.2
MSS297-3	290	391	74	26	74	0	0	1.074	1.0	0	0	0	0	1.0	2.3	1.2
MSQ029-1	288	338	85	13	74	11	2	1.076	1.5	45	0	0	0	1.5	4.5	0.5
MSU245-2	270	332	81	18	77	4	1	1.081	1.0	20	15	5	0	-	3.3	0.6

Table 7

**PRELIMINARY TRIAL, CHIP-PROCESSING LINES**  
**MONTCALM RESEARCH FARM**  
**May 4 to September 15, 2010 (134 days)**

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>2</sup>	PERCENT (%) TUBER QUALITY <sup>3</sup>				SCAB <sup>4</sup>	MAT <sup>5</sup>	BRUISE <sup>6</sup>
	US#1	TOTAL	US#1	Bs	As	OV	PO			HH	VD	IBS	BC			
<b>Pike</b>	<b>269</b>	<b>338</b>	<b>80</b>	<b>18</b>	<b>74</b>	<b>6</b>	<b>2</b>	<b>1.076</b>	<b>1.0</b>	<b>10</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>2.0</b>	<b>0.6</b>
MST441-1	253	341	74	25	69	5	1	1.072	1.5	0	0	0	0	1.0	1.3	0.8
MSU358-2	251	291	87	12	74	13	1	1.079	1.0	0	0	0	0	-	1.8	1.2
A01143-3C	247	326	76	15	76	0	10	1.078	1.5	5	0	25	0	1.5	3.5	0.6
A00188-3C	230	342	67	29	67	0	4	1.082	1.0	0	10	0	0	1.5	2.5	0.1
AC01151-5W	206	310	66	31	66	0	3	1.076	1.0	0	0	15	0	3.5	2.8	0.7
MST202-5	147	239	61	36	61	0	2	1.064	1.0	0	30	0	0	1.5	1.0	0.0
MSR160-2Y	126	320	39	61	39	0	0	1.083	1.5	0	0	0	0	2.0	2.0	0.0
MEAN	342	423						1.080						2.0	2.4	0.8
HSD <sub>0.05</sub>	233	225						0.012						2.3	1.8	

<sup>LBR</sup> Line(s) demonstrated foliar resistance to Late Blight (*Phytophthora infestans*) in inoculated field trials at the MSU Muck Soils Research Farm.

<sup>1</sup>SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.

<sup>2</sup>CHIP SCORE: Snack Food Association Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.

<sup>3</sup>QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 20 Oversize and/or A-size tubers cut.

<sup>4</sup>SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.

<sup>5</sup>MATURITY RATING: August 24, 2010; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

<sup>6</sup>BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Table 8

**PRELIMINARY TRIAL, TABLESTOCK LINES**  
**MONTCALM RESEARCH FARM**  
**May 4 to September 7, 2010 (126 days)**

LINE	PERCENT (%)															
	CWT/A		PERCENT OF TOTAL <sup>1</sup>					SP GR	CHIP SCORE <sup>2</sup>	TUBER QUALITY <sup>3</sup>				SCAB <sup>4</sup>	MAT <sup>5</sup>	BRUISE <sup>6</sup>
	US#1	TOTAL	US#1	Bs	As	OV	PO			HH	VD	IBS	BC			
MSU161-1	490	529	93	7	80	12	1	1.074	2.5	0	1	0	0	2.0	2.5	0.8
MSR214-2P	457	543	84	16	84	0	0	1.069	2.5	0	0	0	0	2.5	3.0	0.8
MST386-1P	454	509	89	7	78	11	4	1.079	2.5	1	4	0	0	1.0	1.8	1.6
MST285-2	419	481	87	10	77	10	3	1.079	2.5	3	0	0	0	1.3	2.8	1.0
<b>Onaway</b>	<b>417</b>	<b>469</b>	<b>89</b>	<b>11</b>	<b>81</b>	<b>8</b>	<b>0</b>	<b>1.063</b>	<b>3.5</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2.1</b>	<b>1.5</b>	<b>1.7</b>
CO99256-2R	398	510	78	22	77	1	0	1.069	2.5	0	4	0	0	2.8	3.0	0.8
MSU320-2Y	393	462	85	14	83	2	1	1.074	2.5	0	1	0	0	1.0	3.0	0.8
MSU613-1	350	385	91	9	83	8	0	1.070	1.0!	0	0	0	0	2.5	1.8	0.5
Colorado Rose	330	390	85	13	75	9	2	1.065	2.5	0	3	0	0	3.5	1.3	0.6
MSU202-1P	322	376	86	13	68	18	1	1.062	2.5	0	0	0	0	-	2.3	0.2
MSU279-1	307	412	75	24	72	2	1	1.079	3.5	0	1	0	0	1.8	2.8	0.8
Midnight	286	415	69	30	67	2	1	1.048	1.5	0	0	0	0	3.5	1.0	0.8
W5767-1R	284	334	85	14	73	12	1	1.070	2.5	1	0	0	0	2.0	1.8	2.0
MSU500-2SPL	280	466	60	40	60	0	0	1.071	1.5	0	0	0	0	2.0	1.5	0.8
MSU200-5PP	242	278	87	13	78	9	0	1.064	1.5	0	0	0	0	1.0	2.5	0.8
Zongshu 3	242	302	80	16	80	0	3	1.070	3.0	1	0	0	0	3.5	2.3	0.9
MSNDU022-1	238	282	85	14	80	5	1	1.079	1.0	2	0	0	0	3.0	1.0	1.0
MSNDU045-1	225	315	71	28	71	0	1	1.063	1.0	0	1	0	0	-	1.0	0.8
CO00291-5R	222	268	83	17	83	0	0	1.063	2.5	1	1	0	0	2.5	4.0	0.7
MSU616-3P	197	282	70	28	70	0	2	1.066	1.5	0	0	0	0	2.0	2.0	-
MSR217-1R	194	238	81	16	73	9	3	1.059	2.0	0	0	0	0	2.0	1.0	0.7
MSR297-A	173	211	82	18	79	3	0	1.065	1.0!	0	0	0	0	1.0	1.8	0.3
MSU616-1PP	168	276	61	38	61	0	1	1.065	1.5	0	0	0	0	2.0	1.0	0.8
Jingshu 2	154	291	53	46	52	1	1	1.089	2.0	1	4	0	0	3.0	3.5	2.4
MST406-2RR	146	213	69	16	63	5	16	1.048	1.5	0	0	0	0	1.5	1.8	0.5
MSR241-4RY	120	204	59	41	58	1	0	1.067	1.5	0	0	0	0	3.5	1.8	0.8
Sieglinde	75	217	34	61	34	0	4	1.071	-	0	0	0	0	0.5	2.8	-
MSQ405-1PP	72	159	45	55	45	0	0	1.064	1.5	0	0	0	0	2.0	3.3	0.5

Table 8

**PRELIMINARY TRIAL, TABLESTOCK LINES**  
**MONTCALM RESEARCH FARM**  
**May 4 to September 7, 2010 (126 days)**

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>				SP GR	CHIP SCORE <sup>2</sup>	PERCENT (%) TUBER QUALITY <sup>3</sup>							
	US#1	TOTAL	US#1	Bs	As	OV			PO	HH	VD	IBS	BC	SCAB <sup>4</sup>	MAT <sup>5</sup>	BRUISE <sup>6</sup>
1991-563-18	58	144	40	60	40	0	0	1.082	1.5	0	0	0	0	1.0	3.3	0.4
MSU616-2PP	17	104	16	84	16	0	0	1.071	1.0	0	0	0	0	2.0	1.8	0.6
MEAN	258	336						1.069						2.1	2.1	0.9
HSD <sub>0.05</sub>	268	276						0.010						2.3	2.1	

<sup>LBR</sup> Line(s) demonstrated foliar resistance to Late Blight (*Phytophthora infestans*) in inoculated field trials at the MSU Muck Soils Research Farm.

<sup>1</sup>SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.

<sup>2</sup>CHIP SCORE: Snack Food Association Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.

<sup>3</sup>QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 20 Oversize and/or A-size tubers cut.

<sup>4</sup>SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.

<sup>5</sup>MATURITY RATING: August 24, 2010; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

<sup>6</sup>BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Table 9

MICHIGAN STATE UNIVERSITY  
POTATO BREEDING and GENETICS2008-2010 SCAB DISEASE TRIAL SUMMARY  
SCAB NURSERY, MONTCALM CO., MI

LINE	3-YR* AVG.	2010 RATING	2010 WORST	2010 N	2009 RATING	2009 WORST	2009 N	2008 RATING	2008 WORST	2008 N
<i>Sorted by ascending 2010 Rating;</i>										
A98289-1RUS	-	0.5	1	2	-	-	-	-	-	-
Sieglinde	-	0.5	1	2	-	-	-	-	-	-
MSS297-3	<b>1.1</b>	0.9	1	4	1.0	1	4	1.5	2	1
1991-563-18	-	1.0	1	2	-	-	-	-	-	-
AC00395-2RUS	-	1.0	1	2	-	-	-	-	-	-
<b>Goldrush Russet</b>	<b>1.0*</b>	<b>1.0</b>	<b>1</b>	<b>2</b>	<b>1.0</b>	<b>1</b>	<b>4</b>	-	-	-
MSH228-6	<b>1.1</b>	1.0	1	2	1.3	2	4	1.0	1	3
MSJ126-9Y	<b>1.1</b>	1.0	1	2	1.3	2	4	1.1	2	4
MSL007-B	<b>1.0*</b>	1.0	1	2	1.0	1	3	-	-	-
MSM037-3	<b>1.3</b>	1.0	1	2	1.3	2	4	1.8	2	4
MSN215-2P	<b>0.9</b>	1.0	1	2	0.8	1	4	1.0	1	4
MSP270-1	<b>1.3*</b>	1.0	1	2	1.5	2	4	-	-	-
MSQ035-3 <sup>LBR</sup>	<b>1.5</b>	1.0	1	2	2.0	2	4	1.5	2	3
MSR036-5 <sup>LBR</sup>	<b>1.3</b>	1.0	1	2	1.3	2	4	1.5	2	3
MSR102-3 <sup>LBR</sup>	<b>1.0</b>	1.0	1	2	0.8	1	4	1.1	2	4
MSR127-2	<b>1.1</b>	1.0	1	2	1.0	1	4	1.3	2	4
MSR131-2	-	1.0	1	2	-	-	-	-	-	-
MSR169-8Y	<b>1.0</b>	1.0	1	2	1.0	1	4	1.0	1	2
MSR297-A	<b>1.5</b>	1.0	1	2	1.7	2	3	1.8	2	3
MSS544-1R	<b>0.9</b>	1.0	1	2	0.8	1	4	1.0	1	4
MST386-1P	-	1.0	1	2	-	-	-	-	-	-
MSU320-2Y	-	1.0	1	1	-	-	-	-	-	-
MSU383-1	-	1.0	1	2	-	-	-	-	-	-
MSU384-1	-	1.0	1	2	-	-	-	-	-	-
ND8229-3	-	1.0	1	2	-	-	-	-	-	-
Silverton Russet	<b>1.0</b>	1.0	1	2	1.3	2	4	0.8	1	4
W2609-1R	-	1.0	1	2	-	-	-	-	-	-
W2683-2RUS	-	1.0	1	2	-	-	-	-	-	-
MSU200-5PP	-	1.0	2	2	-	-	-	-	-	-
<b>Pike</b>	<b>1.3</b>	<b>1.1</b>	<b>2</b>	<b>8</b>	<b>1.5</b>	<b>2</b>	<b>8</b>	<b>1.4</b>	<b>2</b>	<b>15</b>
A98134-2RUS	-	1.3	2	2	-	-	-	-	-	-
MSJ147-1	<b>1.4</b>	1.3	2	2	1.7	2	3	1.4	2	4
MSK409-1	<b>1.6</b>	1.3	2	2	1.6	2	4	2.0	4	3
MSQ279-1	-	1.3	2	2	-	-	-	-	-	-
MST441-1	-	1.3	2	2	-	-	-	-	-	-
W8946-1RUS	-	1.3	2	2	-	-	-	-	-	-
MSQ070-1 <sup>LBR</sup>	<b>1.2</b>	1.3	2	2	1.3	2	3	1.0	1	4
MSR061-1 <sup>LBR,PVYR</sup>	<b>1.2</b>	1.3	2	2	1.1	2	4	1.3	2	4
MSR157-1Y	<b>1.4</b>	1.3	2	2	1.5	2	4	1.5	2	4
MST285-2	<b>1.4*</b>	1.3	2	2	1.5	2	4	-	-	-
MSU230-2Y	-	1.5	2	1	-	-	-	-	-	-
A00188-3C	<b>1.4*</b>	1.5	2	2	1.3	2	3	-	-	-
A01124-3RUS	-	1.5	2	2	-	-	-	-	-	-

Table 9

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POTATO BREEDING and GENETICS2008-2010 SCAB DISEASE TRIAL SUMMARY  
SCAB NURSERY, MONTCALM CO., MI

LINE	3-YR* AVG.	2010 RATING	2010 WORST	2010 N	2009 RATING	2009 WORST	2009 N	2008 RATING	2008 WORST	2008 N
<i>Sorted by ascending 2010 Rating;</i>										
CO00188-4W	<b>1.8*</b>	1.5	2	2	2.0	2	4	-	-	-
CO95051-7W	-	1.5	2	2	-	-	-	-	-	-
<b>Kalkaska (MSJ036-A)</b>	<b>1.3</b>	<b>1.5</b>	<b>2</b>	<b>2</b>	<b>1.3</b>	<b>2</b>	<b>4</b>	<b>1.1</b>	<b>2</b>	<b>4</b>
MSM171-A <sup>LBR</sup>	<b>1.8</b>	1.5	2	2	2.3	3	4	1.7	3	8
MSN148-A	<b>1.6</b>	1.5	2	2	2.0	3	4	1.4	2	4
MSNDU030-1	-	1.5	2	2	-	-	-	-	-	-
MSQ341-BY	-	1.5	2	2	-	-	-	-	-	-
MSR058-1	<b>1.3</b>	1.5	2	2	1.3	2	4	1.3	2	4
MSR605-11	-	1.5	2	2	-	-	-	-	-	-
MSS108-1	-	1.5	2	2	-	-	-	-	-	-
MSS737-1Y <sup>LBR</sup>	<b>1.5</b>	1.5	2	2	1.3	2	4	1.7	2	3
MST202-5	<b>1.6*</b>	1.5	2	2	1.8	3	4	-	-	-
MST220-8	<b>1.8*</b>	1.5	2	2	2.1	3	4	-	-	-
MST306-1	<b>1.3*</b>	1.5	2	2	1.0	2	4	-	-	-
MST406-2RR	-	1.5	2	2	-	-	-	-	-	-
MSU379-1	-	1.5	2	2	-	-	-	-	-	-
ND8307c-3	-	1.5	2	2	-	-	-	-	-	-
A01143-3C	<b>1.5*</b>	1.8	2	2	1.3	2	4	-	-	-
MSL228-1SPL	<b>2.0</b>	1.8	2	2	2.5	4	3	1.6	2	4
MSN170-A	-	1.8	2	2	-	-	-	-	-	-
MSQ440-2	<b>1.3</b>	1.8	2	2	1.0	2	4	1.3	2	4
MST424-3	<b>1.5*</b>	1.8	2	2	1.3	2	4	-	-	-
MSU279-1	-	1.8	2	2	-	-	-	-	-	-
AF2291-10	-	2.0	2	2	-	-	-	-	-	-
Beacon Chipper	<b>1.4</b>	2.0	2	2	1.3	2	4	1.0	1	1
CO99053-3RUS	<b>1.7</b>	2.0	2	2	1.5	3	4	1.5	3	4
MSN230-1RY	<b>1.1*</b>	2.0	2	2	0.3	1	4	-	-	-
MSN251-1Y	-	2.0	2	2	-	-	-	-	-	-
MSQ029-1 <sup>LBR</sup>	<b>2.0</b>	2.0	2	1	2.0	2	4	2.0	2	4
MSQ405-1PP	<b>1.4*</b>	2.0	2	2	0.8	1	4	-	-	-
MSQ432-2PP	<b>1.8</b>	2.0	2	2	1.8	3	4	1.5	2	2
MSQ461-2PP	<b>1.4</b>	2.0	2	2	0.8	1	4	1.5	2	4
MSR041-3	-	2.0	2	2	-	-	-	-	-	-
MSR159-02 <sup>LBR</sup>	<b>1.7</b>	2.0	2	2	1.5	2	4	1.5	2	3
MSR160-2Y	-	2.0	2	2	-	-	-	-	-	-
MSR217-1R	<b>1.9*</b>	2.0	2	1	1.8	3	4	-	-	-
MSR605-5	-	2.0	2	2	-	-	-	-	-	-
MSS258-1	<b>2.0</b>	2.0	2	2	2.0	3	4	2.0	2	1
MSS514-1PP	<b>1.4</b>	2.0	2	2	1.5	3	4	0.8	1	4
MSS576-05SPL	<b>2.0</b>	2.0	2	2	2.0	3	4	-	-	-
MSS582-1SPL	<b>2.0</b>	2.0	2	2	1.6	3	4	2.4	3	4
MSU161-1	-	2.0	2	2	-	-	-	-	-	-
MSU372-1Y	-	2.0	2	2	-	-	-	-	-	-

Table 9

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POTATO BREEDING and GENETICS2008-2010 SCAB DISEASE TRIAL SUMMARY  
SCAB NURSERY, MONTCALM CO., MI

LINE	3-YR* AVG.	2010 RATING	2010 WORST	2010 N	2009 RATING	2009 WORST	2009 N	2008 RATING	2008 WORST	2008 N
<i>Sorted by ascending 2010 Rating;</i>										
MSU500-2SPL	-	2.0	2	2	-	-	-	-	-	-
MSU616-1PP	-	2.0	2	2	-	-	-	-	-	-
MSU616-2PP	-	2.0	2	1	-	-	-	-	-	-
MSU616-3P	-	2.0	2	2	-	-	-	-	-	-
ND8555-8R	-	2.0	2	2	-	-	-	-	-	-
NY139	-	2.0	2	2	-	-	-	-	-	-
<b>Red Norland</b>	-	<b>2.0</b>	<b>2</b>	<b>2</b>	-	-	-	-	-	-
<b>Russet Burbank</b>	-	<b>2.0</b>	<b>2</b>	<b>2</b>	-	-	-	-	-	-
W2310-3	-	2.0	2	2	-	-	-	-	-	-
W5767-1R	-	2.0	2	2	-	-	-	-	-	-
MSQ130-4 <sup>LBR</sup>	<b>1.8</b>	2.0	3	2	1.8	3	4	1.5	2	4
MST437-1	-	2.0	3	2	-	-	-	-	-	-
<b>Onaway</b>	<b>1.8</b>	<b>2.1</b>	<b>3</b>	<b>6</b>	<b>1.6</b>	<b>2</b>	<b>8</b>	<b>1.8</b>	<b>2</b>	<b>7</b>
MSL211-3	<b>2.3*</b>	2.2	3	6	2.4	3	4	-	-	-
MSP515-2	<b>2.0*</b>	2.3	3	2	1.8	2	4	-	-	-
Spunta	-	2.3	3	2	-	-	-	-	-	-
MI Purple Sport III	-	2.3	3	2	-	-	-	-	-	-
MSQ086-3 <sup>LBR</sup>	<b>2.1</b>	2.3	3	4	2.5	4	4	1.5	2	4
MSQ558-2RR	<b>1.7</b>	2.3	3	2	1.3	2	4	1.6	2	4
NorValley	-	2.3	3	2	-	-	-	-	-	-
<b>Russet Norkotah</b>	<b>2.1*</b>	<b>2.3</b>	<b>3</b>	<b>4</b>	<b>2.0</b>	<b>3</b>	<b>4</b>	-	-	-
CO00291-5R	-	2.5	3	2	-	-	-	-	-	-
Missaukee	-	2.5	3	2	-	-	-	-	-	-
MSL292-A	<b>2.5</b>	2.5	3	2	2.3	3	4	2.8	3	4
MSN105-1 <sup>LBR</sup>	<b>2.1</b>	2.5	3	2	2.0	2	4	1.9	3	4
MSQ134-5 <sup>LBR</sup>	<b>2.1</b>	2.5	3	2	1.9	2	4	1.9	3	4
MSQ425-4Y SPL	<b>2.2</b>	2.5	3	4	2.3	4	4	1.9	2	4
MSR148-4	-	2.5	3	2	-	-	-	-	-	-
MSR214-2P	-	2.5	3	2	-	-	-	-	-	-
MSR219-2R	<b>2.4</b>	2.5	3	2	2.5	3	2	2.3	3	4
MSR605-02	-	2.5	3	2	-	-	-	-	-	-
MSR606-02	-	2.5	3	2	-	-	-	-	-	-
MSS206-2 <sup>LBR</sup>	<b>2.1</b>	2.5	3	2	2.1	3	4	1.8	2	4
MSU278-1	-	2.5	3	2	-	-	-	-	-	-
MSU613-1	-	2.5	3	2	-	-	-	-	-	-
Reba	<b>2.2</b>	2.5	3	2	2.0	3	8	2.0	3	8
Spunta G2	-	2.5	3	2	-	-	-	-	-	-
CO99256-2R	<b>2.3*</b>	2.8	4	2	1.8	3	4	-	-	-
<b>Snowden</b>	<b>2.6</b>	<b>2.9</b>	<b>4</b>	<b>10</b>	<b>2.3</b>	<b>3</b>	<b>12</b>	<b>2.6</b>	<b>3</b>	<b>16</b>
<b>Atlantic</b>	<b>2.7</b>	<b>2.9</b>	<b>3</b>	<b>10</b>	<b>2.7</b>	<b>3</b>	<b>8</b>	<b>2.4</b>	<b>3</b>	<b>12</b>
CO02024-9W	-	3.0	3	2	-	-	-	-	-	-
CO02321-4W	-	3.0	3	2	-	-	-	-	-	-
MSL268-D <sup>LBR,PVYR</sup>	<b>2.2</b>	3.0	3	2	2.5	4	4	1.1	2	4

Table 9

2008-2010 SCAB DISEASE TRIAL SUMMARY  
SCAB NURSERY, MONTCALM CO., MI

LINE	3-YR* AVG.	2010 RATING	2010 WORST	2010 N	2009 RATING	2009 WORST	2009 N	2008 RATING	2008 WORST	2008 N
<i>Sorted by ascending 2010 Rating;</i>										
MSM182-1 <sup>LBR,PVYR</sup>	2.7	3.0	3	2	2.9	4	4	2.1	3	4
MSM288-2Y	-	3.0	3	2	-	-	-	-	-	-
MSNDU022-1	-	3.0	3	2	-	-	-	-	-	-
MSP459-5	-	3.0	3	2	-	-	-	-	-	-
MSQ176-5 <sup>LBR</sup>	2.3	3.0	3	2	1.8	3	4	2.0	2	3
MSR089-9Y	-	3.0	3	2	-	-	-	-	-	-
MSR226-1RR	2.0	3.0	3	2	1.0	2	4	2.0	2	3
MSS026-2Y	2.6	3.0	3	2	2.5	3	4	2.2	3	3
MST191-2Y	-	3.0	3	2	-	-	-	-	-	-
MSU088-1	-	3.0	3	2	-	-	-	-	-	-
ND8314-1R	-	3.0	3	2	-	-	-	-	-	-
W2717-5	-	3.0	3	2	-	-	-	-	-	-
Jingshu 2	-	3.0	4	2	-	-	-	-	-	-
MSS070-B	2.5*	3.0	4	2	2.0	3	4	-	-	-
W5015-12	-	3.0	4	2	-	-	-	-	-	-
Jacqueline Lee <sup>LBR</sup>	3.0	3.3	4	2	2.5	3	4	3.3	4	4
CO00197-3W	3.3*	3.5	4	2	3.1	4	4	-	-	-
Colorado Rose	-	3.5	4	2	-	-	-	-	-	-
FL1879	2.7	3.5	4	2	2.0	3	7	2.5	3	11
Midnight	2.9*	3.5	4	2	2.3	4	3	-	-	-
MSR241-4RY	2.5	3.5	4	2	1.8	3	4	2.3	3	4
MSR606-10	-	3.5	4	2	-	-	-	-	-	-
W2978-3	-	3.5	4	2	-	-	-	-	-	-
W6234-4RUS	-	3.5	4	2	-	-	-	-	-	-
Zongshu 3	-	3.5	4	2	-	-	-	-	-	-
CO02033-W	-	3.8	4	2	-	-	-	-	-	-
AC01151-5W	-	3.8	5	2	-	-	-	-	-	-
MSM183-1	-	4.0	4	2	-	-	-	-	-	-
<b>Red Pontiac</b>	-	<b>4.5</b>	<b>5</b>	<b>2</b>	-	-	-	-	-	-
<b>H/LSD<sub>0.05</sub> =</b>		<b>2.3</b>			<b>1.1</b>			<b>0.9</b>		

SCAB DISEASE RATING: MSU Scab Nursery plot rating of 0-5; 0: No Infection; 1: Low Infection <5%, no pitted lesions; 3: Intermediate >20%, some pitted lesions (Susceptible, as commonly seen on Atlantic); 5: Highly Susceptible, >75% coverage and severe pitted lesions.

<sup>LBR</sup> Line(s) demonstrated foliar resistance to Late Blight (*Phytophthora infestans*) in inoculated field trials at the MSU Muck Soils Research Farm.

Table 10

2010 LATE BLIGHT VARIETY TRIAL  
MUCK SOILS RESEARCH FARM

LINE	RAUDPC <sup>1</sup> MEAN	Female	Male	LINE	RAUDPC <sup>1</sup> MEAN
<i>Sorted by ascending RAUDPC value:</i>					
<b><i>Foliar Resistance Category (select lines):</i></b>				<b><i>Foliar Susceptibility Category (select lines)<sup>2</sup>:</i></b>	
Torridon	0.4			Beacon Chipper	43.5
MCR150	0.4			MSR217-1R	43.8
MCR205	0.4			MST306-1	44.3
ND039036-2R	0.4			Silverton Russet	44.3
LBR9	0.6			MSR297-A	44.4
VSB16 (LBR8)	0.7			MSQ134-5	44.7
Montanosa	0.8			A01124-3RUS	44.7
J138K6A22	0.9			A01143-3C	45.1
MSR214-2P	0.9	ND5084-3R	MSJ317-1	ND8229-3RUS	45.5
MSM183-1	0.9	Torridon	J. Lee	Midnight	45.5
Sherriff	0.9			MSQ086-3	45.6
Kenya Baraka	1.0			MSU245-2	46.0
Monserrat	1.0			Austrian Crescent	46.2
MSL268-D	1.0	NY103	J. Lee	MST191-2Y	46.4
Satina	1.0			A98134-2RUS	46.9
MSQ029-1	1.4	B0766-3	NY121	NY139	47.9
Stirling	1.4			MSR041-3	48.6
MSR160-2Y	1.5	NY121	MSJ126-9Y	MSS576-05SPL	48.6
A9520-43	1.7			MSR605-05	49.3
CO00291-5R	2.1			NDU030-1	49.5
Mnandi	2.5			Russian Banana	49.9
MSE149-5Y 82.4	3.9	Saginaw Gold	ND860-2	MSQ035-3	50.4
MSQ405-1PP	4.1	MSG147-3P	MSJ319-1	W2310-3	51.3
NY121	4.9			MSU307-3Y	52.2
MSI152-A	5.0	Mainestay	B0718	<b>Red Norland</b>	<b>52.3</b>
MSU279-1	6.1	Torridon	NY132	ND8314-1R	53.0
MSR061-1	8.7	MegaChip	NY121	<b>Russet Norkotah</b>	<b>53.0</b>
MSR036-5	8.8	MSL766-1	Liberator	CO02321-4W	53.5
MSE149-5Y 82.1	9.0	Saginaw Gold	ND860-2	MSR219-2R	54.5
Gala	9.9			MSS026-2Y	55.0
MSR148-4	10.2	MSI152-A	Dakota Pearl	<b>Onaway</b>	<b>56.3</b>
Sieglinde	10.6			<b>D Red Norland</b>	<b>57.4</b>
MSM182-1	10.9	Stirling	NY121	W2609-1R	58.1
MSR605-02	10.9	Spunta G2	Missaukee	W2978-3	62.9
MSQ176-5	11.8	MSI152-A	Missaukee	A98289-1RUS	64.7
Tukey HSD <sub>0.05</sub>	20.2				

<sup>1</sup> Ratings indicate the average plot RAUDPC (Relative Area Under the Disease Progress Curve).

<sup>2</sup> 157 potato varieties and advanced breeding lines were tested in all. For brevity purposes, only selected varieties and breeding lines are listed.

*Phytophthora infestans* isolate US-8 was inoculated on 8/3/2010. NOTE: US-22 was identified at the Muck Soils Research Farm.

Planted as a randomized complete block design consisting of 3 replications of 4 hill plots on 6/7/2010.

Table 11

MICHIGAN STATE UNIVERSITY  
POTATO BREEDING and GENETICS

**2010 BLACKSPOT BRUISE SUSCEPTIBILITY TEST  
SIMULATED BRUISE SAMPLES\***

ENTRY	NUMBER OF SPOTS PER TUBER						PERCENT (%)	
	0	1	2	3	4	5+	BRUISE FREE	AVERAGE SPOTS/TUBER
<b>ADVANCED TRIAL</b>								
MSQ279-1	21	4					84	0.2
MSP270-1	20	5					80	0.2
MSQ440-2	20	5					80	0.2
MSH228-6	17	7	1				68	0.4
MSQ086-3	17	7	1				68	0.4
MSJ126-9Y	14	8	2	1			56	0.6
MSR061-1	11	13	1				44	0.6
MSJ147-1	12	10	3				48	0.6
FL1879	12	9	4				48	0.7
MSL007-B	10	11	3	1			40	0.8
MSQ070-1	11	5	6	3			44	1.0
Kalkaska (J036-A)	8	7	6	4			32	1.2
MSL292-A	8	5	9	3			32	1.3
Beacon Chipper	7	8	6	3	1		28	1.3
MSP515-2	7	8	6	2	2		28	1.4
<b>Snowden</b>	<b>9</b>	<b>5</b>	<b>5</b>	<b>4</b>		<b>2</b>	<b>36</b>	<b>1.5</b>
MSP459-5	6	6	7	4	2		24	1.6
<b>Atlantic</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>16</b>	<b>2.2</b>
<b>RUSSET TRIAL</b>								
A01124-3RUS	25						100	0.0
<b>Russet Norkotah-NCR</b>	<b>23</b>	<b>1</b>	<b>1</b>				<b>92</b>	<b>0.1</b>
MSS737-1Y	22	2	1				88	0.2
MSR605-11	20	5					80	0.2
MSR605-05	19	6					76	0.2
Silverton Russet	19	5	1				76	0.3
MSR606-10	17	8					68	0.3
W6234-4RUS	17	7	1				68	0.4
MSR606-02	8	5					62	0.4
CO99053-3RUS	16	8	1				64	0.4
A98134-2RUS	16	7	2				64	0.4
MSN170-A	15	8	2				60	0.5
Russet Norkotah-Sandyland	16	6	3				64	0.5
Spunta G2	15	8	2				60	0.5
Goldrush	15	6	4				60	0.6
A98289-1RUS	16	5	2	2			64	0.6
AC00395-2RUS	13	9	2	1			52	0.6

**2010 BLACKSPOT BRUISE SUSCEPTIBILITY TEST  
SIMULATED BRUISE SAMPLES\***

ENTRY	NUMBER OF SPOTS PER TUBER						PERCENT (%)	AVERAGE SPOTS/TUBER
	0	1	2	3	4	5+	BRUISE FREE	
Spunta	13	8	4				52	0.6
<b>Russet Burbank-NCR</b>	<b>12</b>	<b>9</b>	<b>2</b>	<b>2</b>			<b>48</b>	<b>0.8</b>
MSR605-02	8	6	6	2	2	1	32	1.5
W8946-1RUS-NCR	8	3	10	3		1	32	1.5
W2683-2RUS	1	2	11	5	3	3	4	2.6

**NORTH CENTRAL REGIONAL TRIAL**

Red Norland	19	6					76	0.2
W2609-1R	16	9					64	0.4
W2978-3	14	9	2				56	0.5
MSQ176-5	11	13	1				44	0.6
Pontiac	14	7	3		1		56	0.7
ND8307C-3	11	9	4	1			44	0.8
MSL211-3	8	10	5	2			32	1.0
ND8314-1R	10	5	9	1			40	1.0
ND8555-8R	9	7	7	1	1		36	1.1
NorValley	8	9	5	2	1		32	1.2
MSM182-1	10	7	3	3	1	1	40	1.2
W2717-5	6	12	3	3	1		24	1.2
<b>Atlantic</b>	<b>8</b>	<b>5</b>	<b>7</b>	<b>4</b>	<b>1</b>		<b>32</b>	<b>1.4</b>
MSL268-D	5	9	6	3	2		20	1.5
W2310-3	6	3	9	3	3	1	24	1.9
ND8229-3RUS	4	4	10	4	1	2	16	2.0
W5015-12	0	7	7	6	4	1	0	2.4

**ADAPTATION TRIAL, CHIP-PROCESSING LINES**

MSS108-1	18	6	1				72	0.3
MSQ432-2PP	16	8	1				64	0.4
MSR102-3	16	6	3				64	0.5
MSR159-02	12	12	1				48	0.6
MSR226-1RR	15	7	2	1			60	0.6
MSS258-1	12	9	2	2			48	0.8
Pike	11	10	3		1		44	0.8
MSS206-2	8	12	4	1			32	0.9
MSR131-2	9	9	5	2			36	1.0
MSR169-8Y	11	7	3	3	1		44	1.0
MSR036-5	9	8	4	3		1	36	1.2
MSS026-2Y	7	8	3	5	2		28	1.5
Missaukee	5	8	7	4	1		20	1.5
MSR058-1	7	7	6	3		2	28	1.5
<b>Snowden</b>	<b>5</b>	<b>10</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>20</b>	<b>1.6</b>

**2010 BLACKSPOT BRUISE SUSCEPTIBILITY TEST  
SIMULATED BRUISE SAMPLES\***

ENTRY	NUMBER OF SPOTS PER TUBER						PERCENT (%)	AVERAGE SPOTS/TUBER
	0	1	2	3	4	5+	BRUISE FREE	
MSQ558-2RR	7	3	7	6	1	1	28	1.8
<b>Atlantic</b>	<b>2</b>	<b>4</b>	<b>15</b>	<b>3</b>	<b>1</b>		<b>8</b>	<b>1.9</b>
MSN148-A	4	6	9	2	2	2	16	1.9
CO95051-7W	3	7	4	10	1		12	2.0
MSQ035-3	2	7	5	6	5		8	2.2
MSK409-1	1	8	4	5	2	5	4	2.6

**ADAPTATION TRIAL, TABLESTOCK LINES**

MSM288-2Y	23	2					92	0.1
MSS544-1R	22	3					88	0.1
MSN105-1	6	1					86	0.1
MSR157-1Y	19	4	1				79	0.3
MSS576-05SPL	17	7	1				68	0.4
MSQ461-2PP	16	8	1				64	0.4
MSL228-1SPL	16	5	4				64	0.5
MSQ341-BY	17	4	3	1			68	0.5
MSS514-1PP	14	9	2				56	0.5
MSS582-1SPL	15	7	3				60	0.5
MSN215-2P	14	7	4				56	0.6
MSQ134-5	16	4	4	1			64	0.6
J. Lee	8	12	5				32	0.9
<b>Onaway</b>	<b>9</b>	<b>10</b>	<b>3</b>	<b>1</b>	<b>2</b>		<b>36</b>	<b>1.1</b>
Reba	5	7	11	2			20	1.4
MSQ425-4Y	5	8	7	5			20	1.5
MSN230-1RY	3	8	6	4	4		12	1.9

**PRELIMINARY TRIAL, CHIP-PROCESSING LINES**

MSR160-2Y	25						100	0.0
MST202-5	13						100	0.0
A00188-3C	12	1					92	0.1
MSU384-1	21	4					84	0.2
CO00188-4W	20	5					80	0.2
MSU379-1	20	4	1				80	0.2
MST437-1	18	5	2				72	0.4
MSQ130-4	17	7		1			68	0.4
MST306-1	15	5	2				68	0.4
MSQ029-1	14	9	2				56	0.5
A01143-3C	16	5	3	1			64	0.6
<b>Pike</b>	<b>13</b>	<b>10</b>	<b>1</b>		<b>1</b>		<b>52</b>	<b>0.6</b>
MSU245-1	16	3	5	1			64	0.6
MSU245-2	13	9	2	1			52	0.6

**2010 BLACKSPOT BRUISE SUSCEPTIBILITY TEST  
SIMULATED BRUISE SAMPLES\***

ENTRY	NUMBER OF SPOTS PER TUBER						PERCENT (%)	
	0	1	2	3	4	5+	BRUISE FREE	AVERAGE SPOTS/TUBER
AC01151-5W	12	10	2	1			48	0.7
CO00197-3W	12	9	4				48	0.7
CO02024-9W	12	10	2	1			48	0.7
MST441-1	12	8	4	1			48	0.8
MST220-8	14	4	5	1	1		56	0.8
NY139	8	12	5				32	0.9
NDU030-1	10	7	5	3			40	1.0
MSR148-4	6	14	4		1		24	1.0
CO02033-1W	8	9	6	2			32	1.1
MST424-3	11	4	6	4			44	1.1
<b>Snowden</b>	<b>7</b>	<b>10</b>	<b>5</b>	<b>3</b>			<b>28</b>	<b>1.2</b>
MSS297-3	9	6	8	1		1	36	1.2
MSU358-2	9	7	5	3	1		36	1.2
MSU088-1	6	9	8	2			24	1.2
CO02321-4W	7	9	5	3	1		28	1.3
AF2291-10	6	7	9	1	2		24	1.4
MSU383-1	12	2	4	3	3	1	48	1.4
<b>Atlantic</b>	<b>5</b>	<b>8</b>	<b>8</b>	<b>3</b>	<b>1</b>		<b>20</b>	<b>1.5</b>
MST191-2Y	8	4	8	3	2		32	1.5
MSU246-1	5	7	8	2	3		20	1.6
MSR127-2	4	6	3	5	4	3	16	2.3

**PRELIMINARY TRIAL, TABLESTOCK LINES**

MSU202-1P(1REP)	20	5					80	0.2
MSR297-A	19	5	1				76	0.3
1991-563-18	14	7	1				64	0.4
MSQ405-1PP	15	8	2				60	0.5
MST406-2RR	11	5	2				61	0.5
MSU613-1	8	3		1			67	0.5
MSU616-2PP	6	6	1				46	0.6
Colorado Rose	13	8	4				52	0.6
CO00291-5R	13	7	5				52	0.7
MSR217-1R	11	11	2	1			44	0.7
MSR214-2P	12	8	4	1			48	0.8
MSU279-1	12	7	6				48	0.8
MSU500-2SPL	5	6	2				38	0.8
CO99256-2R	11	9	4	1			44	0.8
MSR241-4RY	10	11	3	1			40	0.8
MSU161-1	12	7	5	1			48	0.8
MSU200-5PP	13	5	6	1			52	0.8

**2010 BLACKSPOT BRUISE SUSCEPTIBILITY TEST  
SIMULATED BRUISE SAMPLES\***

ENTRY	NUMBER OF SPOTS PER TUBER						PERCENT (%)	AVERAGE SPOTS/TUBER
	0	1	2	3	4	5+	BRUISE FREE	
MSU616-1PP	8	6	3	1			44	0.8
Midnight	7	16	1	1			28	0.8
MSNDU045-1	10	10	4	1			40	0.8
MSU320-2Y	12	9	2	1		1	48	0.8
Zongshu 3	14	4	3	4			56	0.9
MSNDU022-1	9	8	6	2			36	1.0
MST285-2	11	5	6	3			44	1.0
MST386-1P	4	8	8	4	1		16	1.6
<b>Onaway</b>	<b>5</b>	<b>6</b>	<b>8</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>20</b>	<b>1.7</b>
W5767-1R	3	8	5	5	3	1	12	2.0
Jingshu 2	3	4	8	4	3	3	12	2.4

**2010 BLACKSPOT BRUISE SUSCEPTIBILITY TEST  
SIMULATED BRUISE SAMPLES\***

ENTRY	NUMBER OF SPOTS PER TUBER						PERCENT (%)	AVERAGE SPOTS/TUBER
	0	1	2	3	4	5+	BRUISE FREE	
<b>USPB/SFA TRIAL CHECK SAMPLES (Not bruised)</b>								
NY138	23	1	1				92	0.1
W2978	22	3					88	0.1
MSJ126-9Y	20	5					80	0.2
W2717-5	15	10					60	0.4
CO97043-14W	14	10	1				56	0.5
NY139	14	9	1	1			56	0.6
CO97065-7W	13	9	3				52	0.6
<b>Snowden</b>	<b>14</b>	<b>8</b>	<b>2</b>	<b>1</b>			<b>56</b>	<b>0.6</b>
AF2291-10	10	13	2				40	0.7
MSL292-A	12	6	3	2	2		48	1.0
W2310-3	8	10	5	2			32	1.0
W5015-12	11	5	5	3	1		44	1.1
<b>Atlantic</b>	<b>2</b>	<b>12</b>	<b>4</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>1.8</b>
<b>USPB/SFA TRIAL BRUISE SAMPLES</b>								
MSJ126-9Y	15	9	1				60	0.4
NY138	17	6	1	1			68	0.4
W2978	12	8	3	2			48	0.8
CO97043-14W	10	9	4	2			40	0.9
NY139	9	10	5		1		36	1.0
MSL292-A	10	9	3	1	1	1	40	1.1
W2717-5	10	5	5	3	2		40	1.3
CO97065-7W	5	5	11	4			20	1.6
AF2291-10	2	10	5	5	2	1	8	1.9
W2310-3	4	9	4	3	2	3	16	2.0
<b>Atlantic</b>	<b>3</b>	<b>7</b>	<b>7</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>12</b>	<b>2.2</b>
<b>Snowden</b>	<b>3</b>	<b>2</b>	<b>7</b>	<b>8</b>	<b>1</b>	<b>4</b>	<b>12</b>	<b>2.6</b>
W5015-12	1	4	5	6	3	6	4	3.0

\* Twenty or twenty-five A-size tuber samples were collected at harvest, held at 50 F at least 12 hours, and placed in a six-sided plywood drum and rotated ten times to produce simulated bruising. Samples were abrasive-peeled and scored 10/18/2010. The table is presented in ascending order of average number of spots per tuber.

**2010 POTATO SEED INVENTORY  
MSU POTATO BREEDING PROGRAM INTRODUCTIONS  
AVAILABILITY OF MICHIGAN CERTIFIED SEED  
A CUMULATIVE INVENTORY**

LINE	TISSUE CULTURE	MINI- TUBERS (UNITS)	FY1 (CWT)	FY2 (CWT)	FY3 (CWT)	FY4 (CWT)	FY5 (CWT)
Beacon Chipper	NO	-	-	40	-	-	?
Canela Russet	YES	-	-	-	125	-	-
CO95051-7W	YES	-	660	244	2,260	2,500	-
NY139	NO	39,677	260	1,600	-	30	-
Michigan Purple	YES	-	-	225	-	-	-
MSH228-6	YES	22,349	-	48	-	-	-
MSJ126-9Y	YES	-	-	272	-	-	1,290
MSJ147-1	YES	-	22	128	-	-	-
MSL007-B	YES	1,207	-	-	-	-	-
MSL292-A	YES	28,187	-	-	-	-	-
MSQ070-1	YES	-	-	128	-	-	-
MSQ086-3	YES	1,712	-	-	-	-	-
MSQ130-4	YES	-	-	-	-	-	-
MSR061-1	YES	24,587	-	-	-	-	-
MSR89-1	YES	-	-	-	-	-	-
MS127-2	YES	-	-	-	-	-	-
MSR148-4	YES	-	-	-	-	-	-
MSR169-8Y	YES	-	-	-	-	-	-
MSS165-2Y	YES	-	-	-	-	-	-

Information listed is a cumulative count of  
Hanson Farms, Iott Seed Farms Inc., Krueger Seed Farm, MSU Potato Breeding Program,  
Sklarczyk Seed Farm and United States Potato Board

**2010 POTATO SEED INVENTORY  
MSU POTATO BREEDING PROGRAM INTRODUCTIONS  
AVAILABILITY OF MICHIGAN CERTIFIED SEED  
INDIVIDUAL GROWER INVENTORY**

**HANSON FARMS, INC.**

LINE	TISSUE CULTURE	MINI-TUBERS (UNITS)	FY1 (CWT)	FY2 (CWT)	FY3 (CWT)	FY4 (CWT)	FY5 (CWT)
Beacon Chipper	-	-	-	-	-	-	-
Canela Russet	-	-	-	-	-	-	-
CO95051-7W	-	-	-	-	-	-	-
NY139	-	-	-	-	-	30	-
Michigan Purple	-	-	-	-	-	-	-
MSH228-6	-	-	-	-	-	-	-
MSJ126-9Y	-	-	-	-	-	-	-
MSJ147-1	-	-	-	-	-	-	-
MSL007-B	-	-	-	-	-	-	-
MSL292-A	-	-	-	-	-	-	-
MSQ070-1	-	-	-	-	-	-	-
MSQ086-3	-	-	-	-	-	-	-
MSQ130-4	-	-	-	-	-	-	-
MSR061-1	-	-	-	-	-	-	-
MSR89-1	-	-	-	-	-	-	-
MS127-2	-	-	-	-	-	-	-
MSR148-4	-	-	-	-	-	-	-
MSR169-8Y	-	-	-	-	-	-	-
MSS165-2Y	-	-	-	-	-	-	-

**IOTT SEED FARMS, INC.**

LINE	TISSUE CULTURE	MINI-TUBERS (UNITS)	FY1 (CWT)	FY2 (CWT)	FY3 (CWT)	FY4 (CWT)	FY5 (CWT)
Beacon Chipper	-	-	-	40	-	-	?
Canela Russet	-	-	-	-	-	-	-
CO95051-7W	-	-	160	-	1,900	2,500	-
NY139	-	-	-	-	-	-	-
Michigan Purple	-	-	-	-	-	-	-
MSH228-6	-	-	-	48	-	-	-
MSJ126-9Y	-	-	-	272	-	-	1,290
MSJ147-1	-	-	-	-	-	-	-
MSL007-B	-	-	-	-	-	-	-
MSL292-A	-	-	-	-	-	-	-
MSQ070-1	-	-	-	128	-	-	-
MSQ086-3	-	-	-	-	-	-	-
MSQ130-4	-	-	-	-	-	-	-
MSR061-1	-	-	-	-	-	-	-
MSR89-1	-	-	-	-	-	-	-
MS127-2	-	-	-	-	-	-	-
MSR148-4	-	-	-	-	-	-	-
MSR169-8Y	-	-	-	-	-	-	-
MSS165-2Y	-	-	-	-	-	-	-

## 2010 POTATO SEED INVENTORY

### KRUEGER SEED FARM, INC.

LINE	TISSUE CULTURE	MINI-TUBERS (UNITS)	FY1 (CWT)	FY2 (CWT)	FY3 (CWT)	FY4 (CWT)	FY5 (CWT)
Beacon Chipper	-	-	-	-	-	-	-
Canela Russet	-	-	-	-	125	-	-
CO95051-7W	-	-	-	-	-	-	-
NY139	-	-	-	-	-	-	-
Michigan Purple	-	-	-	225	-	-	-
MSH228-6	-	-	-	-	-	-	-
MSJ126-9Y	-	-	-	-	-	-	-
MSJ147-1	-	-	-	-	-	-	-
MSL007-B	-	-	-	-	-	-	-
MSL292-A	-	-	-	-	-	-	-
MSQ070-1	-	-	-	-	-	-	-
MSQ086-3	-	-	-	-	-	-	-
MSQ130-4	-	-	-	-	-	-	-
MSR061-1	-	-	-	-	-	-	-
MSR89-1	-	-	-	-	-	-	-
MS127-2	-	-	-	-	-	-	-
MSR148-4	-	-	-	-	-	-	-
MSR169-8Y	-	-	-	-	-	-	-
MSS165-2Y	-	-	-	-	-	-	-

### MSU Potato Breeding and Genetics Program

LINE	TISSUE CULTURE	MINI-TUBERS (UNITS)	FY1 (CWT)	FY2 (CWT)	FY3 (CWT)	FY4 (CWT)	FY5 (CWT)
Beacon Chipper	-	-	-	-	-	-	-
Canela Russet	-	-	-	-	-	-	-
CO95051-7W	-	-	-	-	-	-	-
NY139	-	-	-	-	-	-	-
Michigan Purple	YES	-	-	-	-	-	-
MSH228-6	YES	-	-	-	-	-	-
MSJ126-9Y	YES	-	-	-	-	-	-
MSJ147-1	YES	-	-	-	-	-	-
MSL007-B	YES	1,207	-	-	-	-	-
MSL292-A	YES	1,187	-	-	-	-	-
MSQ070-1	YES	-	-	-	-	-	-
MSQ086-3	YES	1,712	-	-	-	-	-
MSQ130-4	YES	-	-	-	-	-	-
MSR061-1	YES	1,287	-	-	-	-	-
MSR89-1	YES	-	-	-	-	-	-
MS127-2	YES	-	-	-	-	-	-
MSR148-4	YES	-	-	-	-	-	-
MSR169-8Y	YES	-	-	-	-	-	-
MSS165-2Y	YES	-	-	-	-	-	-

## 2010 POTATO SEED INVENTORY

### SKLARCZYK SEED FARM, LLC

LINE	TISSUE CULTURE	MINI-TUBERS (UNITS)	FY1 (CWT)	FY2 (CWT)	FY3 (CWT)	FY4 (CWT)	FY5 (CWT)
Beacon Chipper	-	-	-	-	-	-	-
Canela Russet	YES	-	-	-	-	-	-
CO95051-7W	YES	-	-	-	-	-	-
NY139	-	-	-	-	-	-	-
Michigan Purple	-	-	-	-	-	-	-
MSH228-6	-	-	-	-	-	-	-
MSJ126-9Y	-	-	-	-	-	-	-
MSJ147-1	-	-	-	-	-	-	-
MSL007-B	-	-	-	-	-	-	-
MSL292-A	YES	-	-	-	-	-	-
MSQ070-1	-	-	-	-	-	-	-
MSQ086-3	-	-	-	-	-	-	-
MSQ130-4	-	-	-	-	-	-	-
MSR061-1	YES	-	-	-	-	-	-
MSR89-1	-	-	-	-	-	-	-
MS127-2	-	-	-	-	-	-	-
MSR148-4	-	-	-	-	-	-	-
MSR169-8Y	-	-	-	-	-	-	-
MSS165-2Y	-	-	-	-	-	-	-

### United States Potato Board

LINE	TISSUE CULTURE	MINI-TUBERS (UNITS)	FY1 (CWT)	FY2 (CWT)	FY3 (CWT)	FY4 (CWT)	FY5 (CWT)
Beacon Chipper	-	-	-	-	-	-	-
Canela Russet	-	-	-	-	-	-	-
CO95051-7W	-	-	500	244	360	-	-
NY139	-	39,677	260	1,600	-	-	-
Michigan Purple	-	-	-	-	-	-	-
MSH228-6	-	22,349	-	-	-	-	-
MSJ126-9Y	-	-	-	-	-	-	-
MSJ147-1	-	-	22	128	-	-	-
MSL007-B	-	In 2012	-	-	-	-	-
MSL292-A	-	27,000	-	-	-	-	-
MSQ070-1	-	-	-	-	-	-	-
MSQ086-3	-	-	-	-	-	-	-
MSQ130-4	-	In 2012	-	-	-	-	-
MSR061-1	-	23,300	-	-	-	-	-
MSR89-1	-	In 2012	-	-	-	-	-
MS127-2	-	In 2012	-	-	-	-	-
MSR148-4	-	In 2012	-	-	-	-	-
MSR169-8Y	-	In 2012	-	-	-	-	-
MSS165-2Y	-	In 2012	-	-	-	-	-